

10/019, 993

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FILE 'HOME' ENTERED AT 14:36:28 ON 29 JAN 2003

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Uploading 10019993.str

L1 STRUCTURE uploaded

=> d 11
L1 HAS NO ANSWERS
L1 STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full
L3 970 SEA SSS FUL L1

=> s l3 and ca/lc
25848683 CA/LC
L4 683 L3 AND CA/LC

=> s 13 not 14
L5 287 L3 NOT L4

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=> s 15 and uspatfull/lc  
        4234203 USPATFULL/LC  
L6          0 L5 AND USPATFULL/LC
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=> s 15 and caold/lc
1435626 CAOLD/LC
L7 12 L5 AND CAOLD/LC

=> s 15 not 17
L8 275 L5 NOT L7

=> s 18 and caplus/lc
25935167 CAPLUS/LC
L9 10 L8 AND CAPLUS/LC

=> s 18 not 19
L10 265 L8 NOT L9

=> file ca

=> s 13
L11 253 L3

=> s 112 and 111

10/019, 993

L13 7 L12 AND L11

=> d ibib abs fhitstr hitrn 1-7

L13 ANSWER 1 OF 7 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 135:266639 CA
TITLE: The first potent and selective inhibitors of the
glycine transporter type 2
AUTHOR(S): Caulfield, Wilson L.; Collie, Iain T.; Dickins, Rachel
S.; Epemolu, Ola; McGuire, Ross; Hill, David R.;
McVey, Gillian; Morphy, J. Richard; Rankovic, Zoran;
Sundaram, Hardy
CORPORATE SOURCE: Lead Discovery Unit, Organon Laboratories Ltd.,
Newhouse, ML1 5SH, UK
SOURCE: Journal of Medicinal Chemistry (2001), 44(17),
2679-2682
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:266639

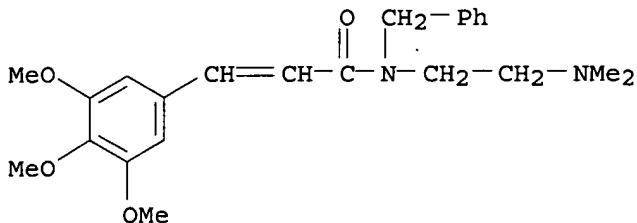
AB Glycine is one of the major inhibitory neurotransmitters in the spinal cord and brain stem of vertebrates. The inhibitory actions of glycine are mediated by the strychnine-sensitive glycine receptor, a ligand-gated chloride channel distributed throughout the spinal cord and brain stem. Glycine is also known to potentiate the action of glutamate acting as an essential co-agonist on postsynaptic N-methyl-D-aspartate (NMDA) receptors. Synaptic levels of glycine are believed to be controlled by high-affinity glycine transporters. These transporters are members of a large family of sodium/chloride-dependent transporters, which are composed of single oligomeric proteins contg. 12 hydrophobic membrane-spanning domains. There is evidence that glycine-mediated inhibition produces muscle relaxation and blockade of this inhibition produces convulsions. Therefore, we postulated that modulators of endogenous levels of glycine might provide skeletal muscle relaxation. A significant amt. of data has accumulated over recent years, indicating that glycine also has an important role in the modulation of nociceptive pathways. Thus, it was anticipated that an increase in synaptic levels of endogenous glycine by a selective inhibition of the GlyT-2 transporter in the spinal cord may offer a unique approach for developing a novel muscle relaxant, anesthetic, and/or analgesic reagent, suitable for use during surgical anesthesia. Due to the discrete localization of both ssGlyR and the GlyT-2 transporter within the spinal cord and brain stem, a glycine modulator might not be expected to lead to serious CNS side effects that are characteristic for currently used mu-opioid analgesics. Since testing of this hypothesis has been hampered by the lack of a suitable GlyT-2 inhibitor, we sought a potent and selective inhibitor of the transporter that would enable us to conduct proof-of-principle studies. In summary, high-throughput screening of Organon's compd. collection provided an attractive drug-like GlyT-2 inhibitor suitable for high-throughput synthesis. A detailed study of the SAR and rapid hit optimization were achieved through synthesis of a soln.-phase 2D library. This led to identification of 4-benzyloxy-3,5-dimethoxy-N-[(1-di methylaminocyclopentyl)methyl]benzamide, the first potent and selective GlyT-2 inhibitor.

IT 363628-11-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(structure-activity relationship of selective glycine transporter type

10/019,993

2 inhibitors)
RN 363628-11-9 CA
CN 2-Propenamide, N-[2-(dimethylamino)ethyl]-N-(phenylmethyl)-3-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



IT 363628-11-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(structure-activity relationship of selective glycine transporter type 2 inhibitors)
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 7 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 133:350056 CA
TITLE: Preparation of aromatic amides useful as CNS agents
INVENTOR(S): Bryans, Justin Stephen; O'Toole, John Colm; Horwell, David Christopher
PATENT ASSIGNEE(S): Warner-Lambert Co., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|---|----------|-------------------|----------|
| WO 2000068184 | A1 | 20001116 | WO 2000-GB1788 | 20000510 |
| W: AE, AG, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, DZ, EE,
GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV,
MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA,
US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| BR 2000010465 | A | 20020213 | BR 2000-10465 | 20000510 |
| EP 1178953 | A1 | 20020213 | EP 2000-927557 | 20000510 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO | | | | |
| JP 2002544186 | T2 | 20021224 | JP 2000-617165 | 20000510 |
| NO 2001005412 | A | 20020109 | NO 2001-5412 | 20011106 |
| PRIORITY APPLN. INFO.: | | | US 1999-133359P P | 19990510 |
| | | | WO 2000-GB1788 W | 20000510 |
| AB | Arom. and heteroarom. amides R1CONR4XnNR2R3 (R1, R2, R3 = alkyl; X = alkylene; R4 = unsubstituted or substituted arom. or heteroarom. group such as naphthyl or fluorenyl), CNS agents useful for treating pain, depression, anxiety, seizures, and schizophrenia, were prep'd. E.g., | | | |

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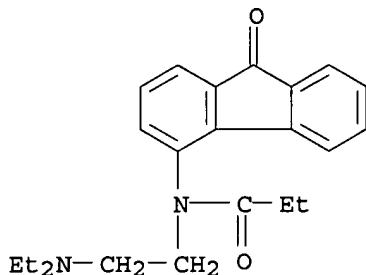
N-propionyl,N-(2-diethylaminoethyl)-1-amino-4-chloronaphthalene was prep'd. The ability of the arom. amides to reduce the hyperalgesia effects of carageenin was detd.

IT 305796-00-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep'n. of arom. amides useful as CNS agents)

RN 305796-00-3 CA

CN Propanamide, N-[2-(diethylamino)ethyl]-N-(9-oxo-9H-fluoren-4-yl)- (9CI) (CA INDEX NAME)



IT 305796-00-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep'n. of arom. amides useful as CNS agents)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 7 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 129:604 CA

TITLE: Substance P antagonists capable of crossing blood-brain barrier for treatment of CNS disease-linked dyskinesia

INVENTOR(S): Imperato, Assunta; Moussaoui, Saliha; Obinu, Carmen; Gobbo, Olivier

PATENT ASSIGNEE(S): Rhone-Poulenc Rorer S.A., Fr.; Imperato, Assunta; Moussaoui, Saliha; Obinu, Carmen; Gobbo, Olivier

SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|--|------------|-----------------|----------|
| WO 9818465 | A1 | 19980507 ✓ | WO 1997-FR1914 | 19971024 |
| W: | AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GH, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| FR 2755013 | A1 | 19980430 | FR 1996-13175 | 19961029 |
| FR 2755013 | B1 | 19981127 | | |

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AU 9749514 A1 19980522 AU 1997-49514 19971024
PRIORITY APPLN. INFO.: FR 1996-13175 19961029
WO 1997-FR1914 19971024

AB The invention concerns the use of substance P antagonists, capable of passing through the blood-brain barrier, for prep. a medicine for the treatment of diskinesia linked with diseases of the **central nervous system**, e.g. tardive dyskinesia.

IT 170566-85-5

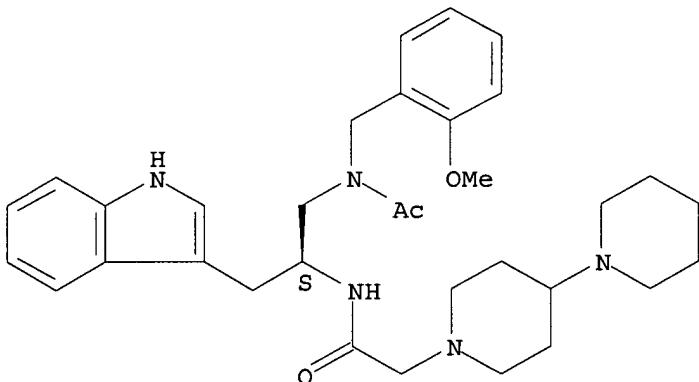
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(substance P antagonists capable of crossing blood-brain barrier for treatment of **CNS** disease-linked diskinesia)

RN 170566-85-5 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1S)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-85-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(substance P antagonists capable of crossing blood-brain barrier for treatment of **CNS** disease-linked diskinesia)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 7 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 113:172016 CA

TITLE: Preparation of 5-phenylimidazoline derivatives as **central nervous system** agents

INVENTOR(S): Tkaczynski, Tadeusz; Tkaczynska, Danuta; Kielczewska, Halina; Stefanczyk, Janusz; Kleinrok, Zdzislaw; Zebrowska-Lupina, Iwona; Stelmasiak, Małgorzata; Ossowska, Grażyna

PATENT ASSIGNEE(S): Akademia Medyczna, Lublin, Pol.

SOURCE: Pol., 4 pp.

CODEN: POXXA7

DOCUMENT TYPE: Patent

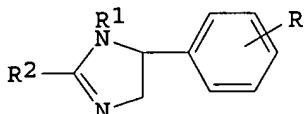
LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|---------------------|-----------------|----------|
| PL 136249 | B2 | 19860228 | PL 1982-239765 | 19821223 |
| PRIORITY APPLN. INFO.: | | | PL 1982-239765 | 19821223 |
| OTHER SOURCE(S): | | CASREACT 113:172016 | | |
| GI | | | | |



I

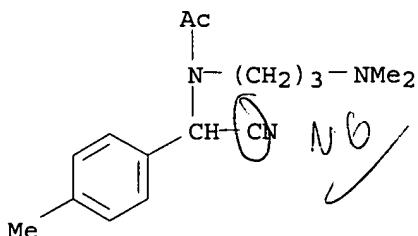
AB The title compds. (I; R = H, halo, alkyl, alkoxy, F3C; R1 = alkyl, aralkyl, dialkylaminoalkylene; R2 = alkyl) are prepd. by catalytic hydrogenation of the appropriate phenylacetonitrile in an org. solvent (preferably MeOH, EtOH, or PrOH) in the presence of Raney Ni at 50-180.degree.. I affect the **central nervous system**, e.g., restrict spontaneous mobility. Thus, 30 g N-acetyl-N-methyl-.alpha.-aminophenylacetonitrile in MeOH was hydrogenated over Raney Ni for 2 h at 5 MPa and 125-135.degree.. After cooling, the catalyst was sep'd., MeOH was removed by distn., and the residue was vacuum distd. to give 29 g I (R = H; R1 = R2 = Me).

IT 129879-91-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(catalytic hydrogenation of)

RN 129879-91-0 CA

CN Acetamide, N-[cyano(4-methylphenyl)methyl]-N-[3-(dimethylamino)propyl]- (9CI) (CA INDEX NAME)



IT 129879-91-0 129879-92-1 129879-93-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(catalytic hydrogenation of)

L13 ANSWER 5 OF 7 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 72:65203 CA

TITLE: Alterations in brain serotonin metabolism mediating enhanced memory consolidation

AUTHOR(S): Essman, Walter B.

CORPORATE SOURCE: Univ. of New York, Flushing, NY, USA

SOURCE: Present Status Psychotropic Drugs, Proc. Int. Congr. Coll. Int. Neuro-Psychopharmacol, 6th (1969), Meeting Date 1968, 305-6

CODEN: 22AKA8

DOCUMENT TYPE: Conference

LANGUAGE: English

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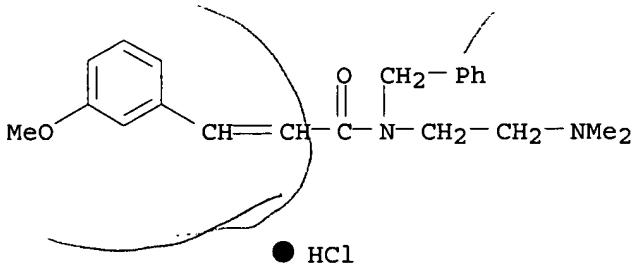
AB A study was undertaken to relate pharmacol.-induced alterations in brain 5-
erotonin (I) metabolism during learning and following a known amnesic event, electroconvulsive shock (ECS), to changes in memory consolidation. Such changes were reflected in a redn. in the incidence of ECS-induced retrograde amnesia, or enhanced memory consolidation to which attendant alterations in brain 5-HT metabolism were related. Groups of male mice were injected i.p. with either 10.0 mg/kg of amitriptyline HCl (II), 10.0 mg/kg of pipradol (III), 45 mg/kg of N-[2-(dimethylamino)ethyl]-N-benzyl-3-methoxycinnamamide HCl, 1.0 mg/kg of nicotine sulfate (IV), 2.0 mg/kg of uric acid (V), or an equiv. vol. of 0.9% NaCl soln. For conditions paralleling those of drug treatment, conditioning, and ECS, mice were killed 20 min following ECS. The whole brain (excluding cerebellum and olfactory bulbs) was removed rapidly and frozen. Assays for I and 5-hydroxyindoleacetic acid (VI) were carried out. With all of the drug-treatment conditions there was a significant redn. in the incidence of ECS-induced retrograde amnesia. Brain 5-HT concn. was significantly elevated 1 hr following treatment with II (46%) and V (41%) and, under all drug treatments, VI was reduced by from 8 to 61%. When animals were trained, central nervous system stimulants (III, V, and IV) led to a decreased I turnover rate and increased turnover time, suggesting that I synthesis was depressed. Drug treatment, ECS or the ECS-drug interaction had no effect upon MAO activity or seizure threshold. Alterations in brain 5-HT metabolism during training, or upon administration of an amnesic event (ECS) following learning, can provide for mediation of enhanced memory consolidation.

IT 15114-65-5

RL: BIOL (Biological study)
(serotonin metabolism response to, in brain, memory in relation to)

RN 15114-65-5 CA

CN Cinnamamide, N-benzyl-N-[2-(dimethylamino)ethyl]-m-methoxy-,
monohydrochloride (8CI) (CA INDEX NAME)



IT 15114-65-5

RL: BIOL (Biological study)
(serotonin metabolism response to, in brain, memory in relation to)

L13 ANSWER 6 OF 7 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 64:75598 CA

ORIGINAL REFERENCE NO.: 64:14129c-e

TITLE: N - Acyl - N - (trialkoxyphenylalkylene)alkylenediamines

INVENTOR(S): Petracek, Francis J.

PATENT ASSIGNEE(S): Rexall Drug and Chemical Co.

SOURCE: 2 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

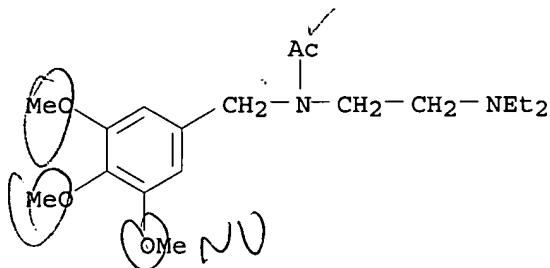
PATENT NO.

KIND DATE

APPLICATION NO. DATE

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US 3234276 19660208 US 19630412
GI For diagram(s), see printed CA Issue.
AB Title compds. (I) were prep'd. by treating the corresponding amine with an acid anhydride or BzCl. Thus, to 20 g. N,N-diethyl-N'-(3,4,5-trimethoxybenzyl)ethylenediamine (HCl salt m. 171-4.degree.) is added 20 g. Ac₂O at 0.degree. and stirred at 0.degree. for 16 hrs. to give 81% N'-acetyl deriv. as the picrate, m. 132-5.degree.. Also prep'd. was the picrate of the N-Bz deriv., m. 145.degree.. I are useful as central nervous system depressants.
IT 5292-94-4, Acetamide, N-[2-(diethylamino)ethyl]-N-(3,4,5-trimethoxybenzyl)- (prepn. of)
RN 5292-94-4 CA
CN Acetamide, N-[2-(diethylamino)ethyl]-N-(3,4,5-trimethoxybenzyl)- (7CI, 8CI) (CA INDEX NAME)



IT 5292-94-4, Acetamide, N-[2-(diethylamino)ethyl]-N-(3,4,5-trimethoxybenzyl)- 5351-98-4, Acetamide, N-[2-(diethylamino)ethyl]-N-(3,4,5-trimethoxybenzyl)-, picrate (prepn. of)

L13 ANSWER 7 OF 7 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 56:67250 CA
ORIGINAL REFERENCE NO.: 56:13022a-c
TITLE: Normorphine derivatives
INVENTOR(S): Boehringer, Albert; Boehringer, Ernst; Liebrecht, Ilse; Liebrecht, Julius; Mayer-List, Walter
PATENT ASSIGNEE(S): C. H. Boehringer Sohn
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|----------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |
| GB 874217 | | 19591028 | GB | |
| FR 1333710 | | | FR | |
| US 3101339 | | 1963 | US | |

PRIORITY APPLN. INFO.: DE 19581030
AB Quaternary derivs. of normorphine and acylnormorphines are more effective than N-allylnormorphines in antagonizing the effects of morphine. These compds. have esp. marked activity on the central nervous system. They are prep'd. by alkylation of N-allyl- or N-propargylmorphine in an inert solvent. The following compds. are described (m.p. given): N-Diallylnormorphinium bromide, 190.degree.; N-diallylnormorphinium iodide, 164.degree.; 3,6-di-O-acetyl-N-diallylnormorphinium bromide, 188.degree.; 3,6-di-O-propionyl-N-diallylnormorphinium bromide, 190-3.degree.; N-propargyl-N-allylnormorphinium bromide, 185-6.degree., [alpha].20D = -99.degree. .+- .1.degree., (c 1, MeOH); N-dipropargylnormorphinium bromide, 182.degree.; 3,6-di-O-acetyl-N-propyl-N-allylnormorphinium

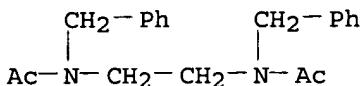
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bromide, c 170.degree.; N-propargyl-N-propylnormorphinium bromide, 190-3.degree.; N-dipropylnormorphinium iodide, 172-9.degree. (decompr.); N-diallylnormorphinium chloride, 179.degree.; 3,6-di-O-acetyl-N-propyl-N-propylnormorphinium bromide, 160-5.degree. (decompr.).

IT 10507-26-3, Acetamide, N,N'-ethylenebis[N-benzyl-
(prepn. of)

RN 10507-26-3 CA

CN Acetamide, N,N'-1,2-ethanediylbis[N-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 10507-26-3, Acetamide, N,N'-ethylenebis[N-benzyl-
(prepn. of)

=> s l11 not l13

L14 246 L11 NOT L13

=> s l14 and (pharm? or drug)

432004 PHARM?

446924 DRUG

L15 65 L14 AND (PHARM? OR DRUG)

=> d ibib abs fhitstr hitrn 1-65

L15 ANSWER 1 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 138:19472 CA

TITLE: Method of identifying inhibitors of Cdc25 using three dimensional crystal structure of the catalytic domain of Cdc25

INVENTOR(S): Taylor, Neil R.; Borhani, David; Epstein, David; Rudolph, Johannes; Ritter, Kurt; Fujimori, Taro; Robinson, Simon; Eckstein, Jens; Haupt, Andreas; Walker, Nigel; Dixon, Richard W.; Choquette, Deborah; Blanchard, Jill; Kluge, Arthur; Pal, Kollol; Bockovich, Nicholas; Come, Jon; Hediger, Mark

PATENT ASSIGNEE(S): Australia

SOURCE: U.S. Pat. Appl. Publ., 246 pp., Cont.-in-part of U.S. Ser. No. 645,750.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2002183249 | A1 | 20021205 | US 2001-797500 | 20010301 |
| PRIORITY APPLN. INFO.: | | | US 1999-172215P | P 19990831 |
| | | | US 2000-645750 | A2 20000824 |

OTHER SOURCE(S): MARPAT 138:19472

AB The present invention relates to the x-ray crystallog. study of proteins comprising the catalytic domains of Cdc25. The at. coordinates which result from this study are of use in identifying compds. which fit in the catalytic domain and are, therefore, potential inhibitors of Cdc25. The present invention further provides proteins which comprise the ligand

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binding domain of Cdc25, cryst. forms of these proteins and the use of these cryst. forms to det. the three dimensional structure of the catalytic domain of Cdc25. The invention also relates to the use of the three dimensional structure of the Cdc25 catalytic domain in methods of designing and/or identifying potential inhibitors of Cdc25 activity, for example, compds. which inhibit the binding of a native substrate to the Cdc25 catalytic domain. These Cdc25 inhibitors are of use in methods of treating a patient having a condition which is modulated by Cdc25 activity, for example, a condition characterized by excessive, inappropriate or undesirable cellular proliferation such as cancer.

IT 329276-18-8P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

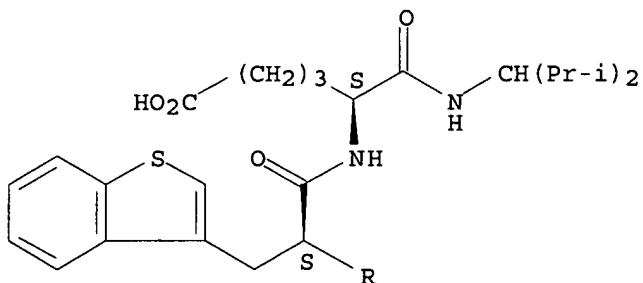
(method of identifying inhibitors of Cdc25 using three dimensional crystal structure of catalytic domain of Cdc25)

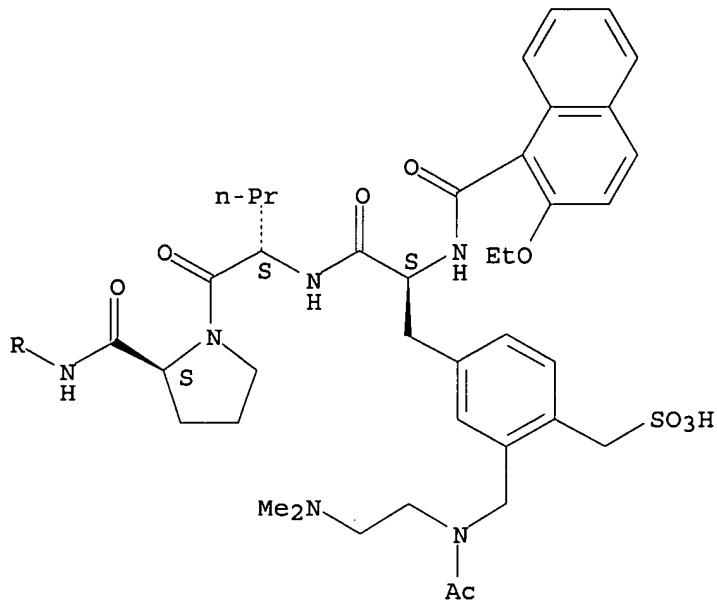
RN 329276-18-8 CA

CN L-Norvalinamide, 3-[[acetyl[2-(dimethylamino)ethyl]amino]methyl]-N-[(2-ethoxy-1-naphthalenyl)carbonyl]-4-(sulfomethyl)-L-phenylalanyl-L-norvalyl-L-prolyl-3-benzo[b]thien-3-yl-L-alanyl-5-carboxy-N-[2-methyl-1-(1-methylethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





IT 329276-18-8P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(method of identifying inhibitors of Cdc25 using three dimensional crystal structure of catalytic domain of Cdc25)

L15 ANSWER 2 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 137:346202 CA

TITLE: Pharmaceutical

Anticholinergics and NK1-receptor antagonists for the treatment of respiratory tract diseases

INVENTOR(S) : Pairet, Michel; Pieper, Michael P.; Meade, Christopher J. M.

PATENT ASSIGNEE (S) : Germany

SOURCE: U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U. S. Provisional Ser. NO. 281,653.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. 2,313,453 KIND DES DATE 1943-08-17

US 2002169181 A1 20021114 US 2002-92116 20020306
DE 10111058 A1 20020912 DE 2001-10111058 20010308
PRIORITY APPLN. INFO.: DE 2001-10111058 A 20010308
US 2001-281653P P 20010405

OTHER SOURCE(S) : MARPAT 137:346202

AB The invention discloses pharmaceutical compns. based on anticholinergics and NK1-receptor antagonists, processes for prep. them, and their use in the treatment of respiratory tract diseases. Prepn. of selected compds. is included.

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IT 170566-84-4, Lanepitant

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

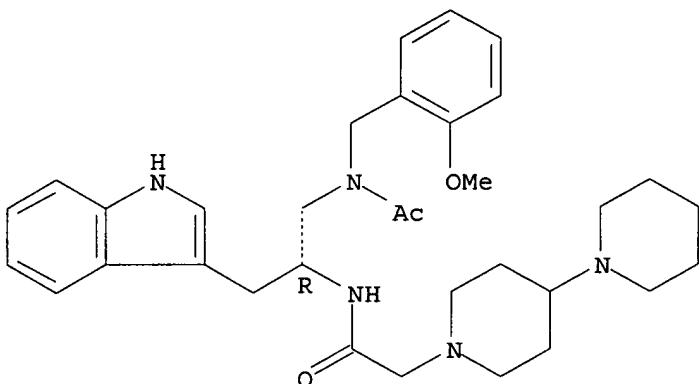
RE: The Pharmacological aspect (Biological study): USES (Uses)

(anticholinergics and NK1-receptor antagonists for treatment of respiratory tract diseases)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, Lanepitant

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

RE: The pharmacological assay (Biological study): USES (Uses)

Biological study, 1993 (365),
(anticholinergics and NK1-receptor antagonists for treatment of respiratory tract diseases)

L15 ANSWER 3 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 137:237717 CA

ACCESSION NUMBER: 10770771 CR
TITLE: Inhalant compositions containing anticholinergics and NK1 receptor antagonists

INVENTOR(S): Meade, Christopher John Montague; Pairet, Michel;

INVENTOR(S): Heade, Christopher John
Pieper, Michael Paul

PATENT ASSIGNEE(S): Pfeifer, Michael Paul
Boehringer Ingelheim Pharma K.-G., Germany

PATENT ASSIGNEE(S): Boehringer Ingelheim F
SOURCE: PCT Int. Appl. 42 pp.

SOURCE: PER INC. APP
CODEN: RIXXD2

DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patient
LANGUAGE: German

LANGUAGE: G
FAMILY ACC NUM COUNT: 3

FAMILY ACC. NUM. CO
PATENT INFORMATION:

WO 2002069944 A2 20020912 WO 2002-EP1987 20020226

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

10/019,993

BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
DE 10111058 A1 20020912 DE 2001-10111058 20010308
PRIORITY APPLN. INFO.: DE 2001-10111058 A 20010308

OTHER SOURCE(S): MARPAT 137:237717

AB The invention relates to drug compns. based on anticholinergics and on NK1 receptor antagonists, to methods for their prodn., and to their use as inhalants for the treatment of respiratory tract diseases. Synthesis of NK1 receptor antagonists from the group of bis-trifluoromethyl-phenyl-piperidine derivs. are described. The products are used in suspension aerosols. Thus a compn. contained (wt./wt.%) : tiotropium bromide 0.015; NK1 receptor antagonist 0.066; soy lecithin 0.2; TG11: TG12 = 2:3 to 100.

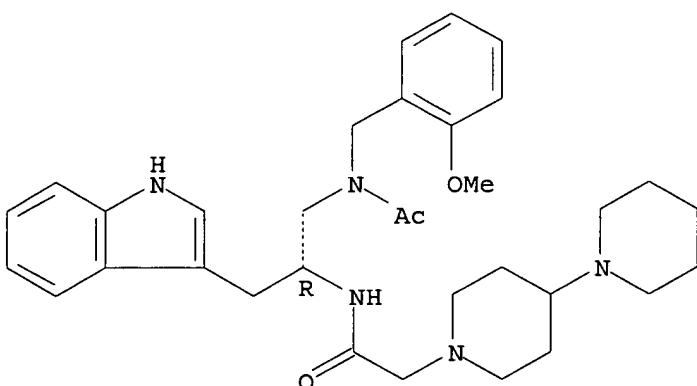
IT 170566-84-4, Lanepitant

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhalant compns. contg. anticholinergics and NK1 receptor antagonists)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, Lanepitant

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhalant compns. contg. anticholinergics and NK1 receptor antagonists)

L15 ANSWER 4 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 137:228607 CA

TITLE: Crystal structure and three-dimensional structure of human Cdc25 catalytic domains and its use in designing peptidomimetic inhibitors

INVENTOR(S): Taylor, Neil R.; Borhani, David; Epstein, David; Rudolph, Johannes; Ritter, Kurt; Fujimori, Taro; Robinson, Simon; Eckstein, Jens; Haupt, Andreas; Walker, Nigel; Dixon, Richard W.; Choquette, Deborah; Blanchard, Jill; Kluge, Arthur; Pal, Kollol; Bockovich, Nicholas; Come, Jon; Hediger, Mark

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany; GPC Biotech Inc.

SOURCE: PCT Int. Appl., 351 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2002070680 | A1 | 20020912 | WO 2001-US6587 | 20010301 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | WO 2001-US6587 | 20010301 |

OTHER SOURCE(S): MARPAT 137:228607

AB Due to its role in regulating the cell cycle, Cdc25 (a family of dual specificity phosphatases) is a potential target for therapies aimed at controlling proliferative diseases, but rational, structure-based design has not been possible because of the lack of accurate 3-dimensional data. The present invention relates to polypeptides which comprises the ligand binding domain of human Cdc25 proteins, cryst. forms of these polypeptides, and the use of these cryst. forms to det. the 3-dimensional structure of the catalytic domain of Cdc25. In particular, a high resoln. crystal structure was obtained for the polypeptide denoted CDC25B(.DELTA.N8B), comprising residues Glu-368 through Arg-562 of human Cdc25B, complexed with a pentapeptide inhibitor denoted cdc1249 (2-methoxynaphthyl-1-carboxy-(4-sulfomethyl)-L-Phe-L-Glu-L-Glu-L-naphthylalanine-L-Glu-amide). The invention also relates to the use of the 3-dimensional structure of the Cdc25 catalytic domain in methods of designing and/or identifying potential inhibitors of Cdc25 activity, for example, compds. which inhibit the binding of a native substrate to the Cdc25 catalytic domain. The syntheses and structures of a large no. of putative pentapeptide inhibitors are also provided. Such inhibitors have potential in the treatment of diseases assocd. with excessive cellular proliferation, such as cancer, restenosis, reocclusion of coronary artery, and inflammation.

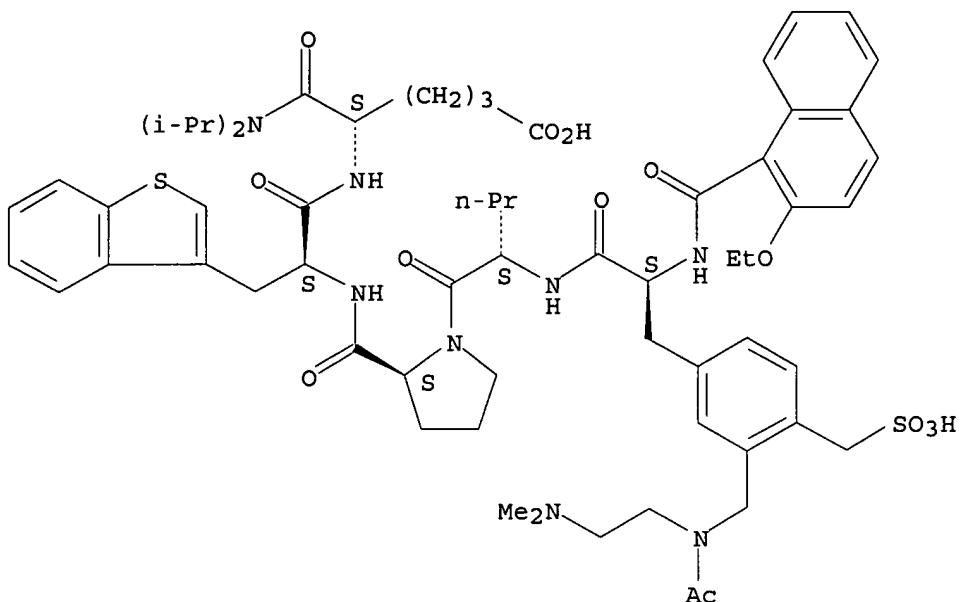
IT 457889-24-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(crystal structure and three-dimensional structure of human Cdc25 catalytic domains and its use in designing peptidomimetic inhibitors)

RN 457889-24-6 CA

CN L-Norvalinamide, 3-[[acetyl[2-(dimethylamino)ethyl]amino]methyl]-N-[(2-ethoxy-1-naphthalenyl)carbonyl]-4-(sulfomethyl)-L-phenylalanyl-L-norvalyl-L-prolyl-3-benzo[b]thien-3-yl-L-alanyl-5-carboxy-N,N-bis(1-methylethyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 457889-24-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(crystal structure and three-dimensional structure of human Cdc25 catalytic domains and its use in designing peptidomimetic inhibitors)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 137:88400 CA

TITLE: A neural network based virtual screening of cytochrome P450 3A4 inhibitors

AUTHOR(S): Molnar, Laszlo; Keseru, Gyorgy M.

CORPORATE SOURCE: Computer Assisted Drug Discovery, Gedeon Richter Ltd., Budapest, H-1475, Hung.

SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(3), 419-421

CODEN: BMCL8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A virtual screening test to identify potential CP450 3A4 inhibitors has been developed. Mol. structures of inhibitors and non-inhibitors available in the Genetest database were represented using 2D Unity fingerprints and a feedforward neural network was trained to classify mols. regarding their inhibitory activity. Validation tests revealed that the authors neural net recognizes at least 89% of 3A4 inhibitors and suggest using this methodol. in the authors virtual screening protocol.

IT 170566-84-4, LY303870

RL: PAC (Pharmacological activity); BIOL (Biological study)

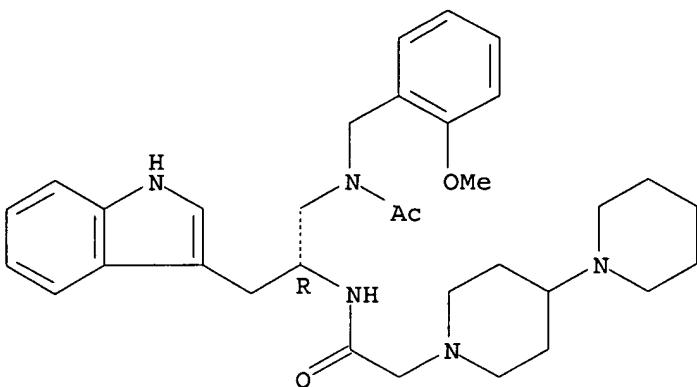
(neural network based virtual screening of cytochrome P 450 3A4 inhibitors)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

10/019, 993

Absolute stereochemistry.



IT 170566-84-4, LY303870

RL: PAC (Pharmacological activity); BIOL (Biological study)
(neural network based virtual screening of cytochrome P 450 3A4
inhibitors)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 136:294733 CA

TITLE: Preparation of spiro compounds as nociceptin receptor
binders

INVENTOR(S): Arai, Toshimitsu; Nishikimi, Yuji; Imamura, Shinichi;
Kamiyama, Keiji; Kobayashi, Makoto

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

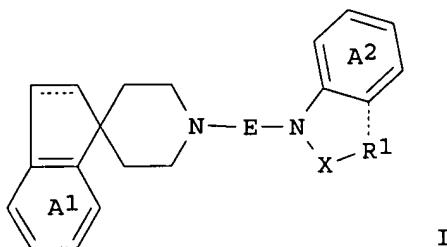
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|-------------------|-----------------|------------|
| WO 2002026714 | A1 | 20020404 | WO 2001-JP8281 | 20010925 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2001088110 | A5 | 20020408 | AU 2001-88110 | 20010925 |
| JP 2002173485 | A2 | 20020621 | JP 2001-291794 | 20010925 |
| PRIORITY APPLN. INFO.: | | | JP 2000-293876 | A 20000927 |
| | | | WO 2001-JP8281 | W 20010925 |
| OTHER SOURCE(S): | | MARPAT 136:294733 | | |
| GI | | | | |



AB The title compds. I [A1 and A2 are each an optionally substituted benzene ring; E is a divalent chain hydrocarbon group which may be substituted; X is CO or the like; R1 is an optionally substituted hydrocarbon group or the like, or alternatively R1 may be bonded to a ring-constituting carbon atom of A2 to form a fused ring; and the dotted line represents a single or double bond; a proviso is given] are prep'd. Processes for prep. I are claimed. In an in vitro test for affinity for the nociceptin receptor, N-[3-(1H-indene-1-spiro-4'-piperidin-1'-yl)propyl]-1-methyl-5-oxo-N-phenyl-3-pyrrolidinecarboxamide fumarate at 1 .mu.M gave 95% binding inhibition. Formulations are given.

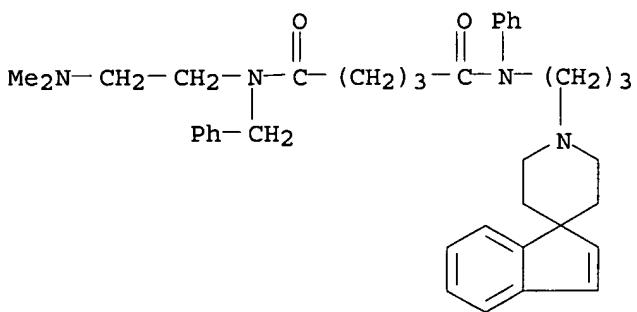
IT 407632-34-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of spiro compds. as nociceptin receptor binders)

RN 407632-34-2 CA

CN Pentanediamide, N-[2-(dimethylamino)ethyl]-N'-phenyl-N-(phenylmethyl)-N'-(3-spiro[1H-indene-1,4'-piperidin]-1'-ylpropyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

IT 407632-34-2P 407632-50-2P 407632-56-8P

407632-58-0P 407632-60-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of spiro compds. as nociceptin receptor binders)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/019, 993

L15 ANSWER 7 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 136:54027 CA
TITLE: Preparation of vitronectin receptor antagonist
pharmaceuticals
INVENTOR(S): Cheesman, Edward H.; Barrett, John A.; Carpenter, Alan
P., Jr.; Rajopadhye, Milind; Sworin, Michael
PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA
SOURCE: PCT Int. Appl., 318 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2001097861 | A2 | 20011227 | WO 2001-US20203 | 20010621 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: US 2000-213216P P 20000621

OTHER SOURCE(S): MARPAT 136:54027

AB The invention describes compds. (Q)d-Ln-(Ch)d' (Q is a residue having a benzodiazepine-, benzodiazepinedione-, or dibenzotrihydroannulene-type moiety, d = 1-10, d' = 1-100, Ln is a linking group, Ch is a metal-bonding unit) for use in the diagnosis and treatment of cancer in combination therapy in a patient. The present invention also provides novel compds. useful for the treatment of rheumatoid arthritis. Thus, (S,S,S)-4-[N-[3-[3,6-diaza-10-[N-(benzimidazol-2-ylmethyl)-N-methylcarbamoyl]-5-(carboxymethyl)-4-oxobicyclo[5.4.0]undeca-1(7),8,10-trien-3-yl]propyl]carbamoyl]-4-[[4-carboxy-2-[2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclodecyl]acetyl]amino]butanoyl]amino]butanoic acid was prep'd. (claimed compd.). Syntheses of radiopharmaceuticals, e.g., ^{99m}Tc(VnA) (tricine) (phosphine), where VnA represents the vitronectin receptor antagonist, are also described.

IT 277327-74-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

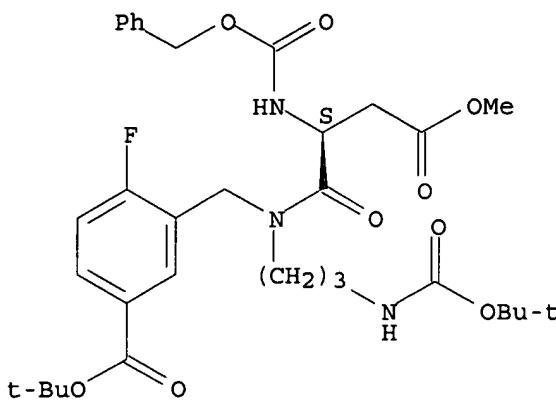
(prepn. of vitronectin receptor antagonist pharmaceuticals)

RN 277327-74-9 CA

CN 11-Oxa-2,5,9-triazatridecanoic acid, 5-[[5-[(1,1-dimethylethoxy)carbonyl]-2-fluorophenyl]methyl]-3-(2-methoxy-2-oxoethyl)-12,12-dimethyl-4,10-dioxo-phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/019, 993



IT 277327-74-9P 277327-75-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of vitronectin receptor antagonist pharmaceuticals)

L15 ANSWER 8 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 135:272953 CA

TITLE: Substituted 1,4-dihydroindeno[1,2-c]pyrazoles as inhibitors of tyrosine kinase

INVENTOR(S): Doyle, Kevin; Rafferty, Paul; Steele, Robert; Turner, Allyson; Wilkins, David; Arnold, Lee

PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany

SOURCE: U.S., 36 pp., Cont.-in-part of U.S. Ser. No. 541,336.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

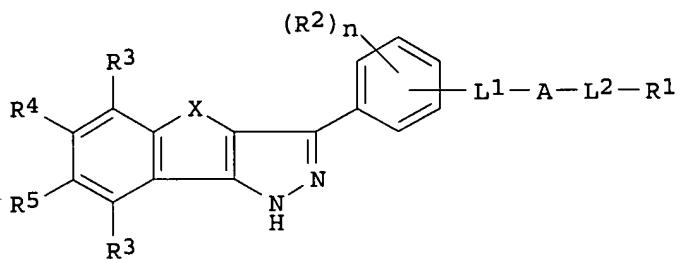
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| US 6297238 | B1 | 20011002 | US 2000-689943 | 20001012 |
| WO 2002030908 | A1 | 20020418 | WO 2001-US42715 | 20011012 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002013485 | A5 | 20020422 | AU 2002-13485 | 20011012 |
| EP 1268437 | A1 | 20030102 | EP 2001-981870 | 20011012 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRIORITY APPLN. INFO.: | | | US 1999-127963P | P 19990406 |
| | | | US 2000-541336 | A2 20000403 |
| | | | US 2000-689943 | A 20001012 |
| | | | WO 2001-US42715 | W 20011012 |

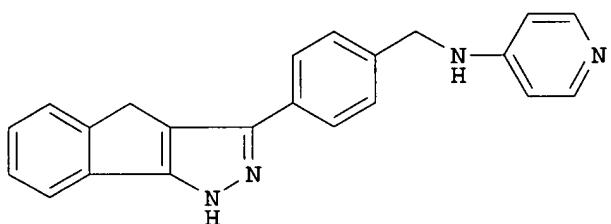
OTHER SOURCE(S):

MARPAT 135:272953

GI



I



II

AB The title compds. I ($L_1 = (E)s(\text{CH}_2)^q$ {E = NRA, O or S; s = 0, 1; q = 0-6 [when s = 1, q \geq 1]; alkylene optionally (multi)substituted by: alkyl, hydroxyalkyl, OH, halo, amino deriv., (un)substituted alkoxy, etc.}; $L_2 = (\text{CH}_2)^q$ {optionally substituted as for L_1 }; A = SO₂NH or NHSO₂ then R1 = alkoxy, (un)substituted Ph, heteroaryl, heterocyclic nitrogen ring {which optionally contains an addnl. O, S or N atom} or amino deriv.; A = CONH or NHCO then R1 = alkoxy, substituted Ph {substituted by nitro or one or more (un)substituted alkoxy groups}, heteroaryl, heterocyclic nitrogen ring {which optionally contains an addnl. O, S or N atom}; A = NRb and q \geq 1 then R1 (un)substituted Ph, (un)substituted heteroaryl or amino deriv.; A = NRb and q = 0 then R1 = (un)substituted heteroaryl; $(R_2)^n$ = (un)substituted alkyl or alkoxy, halo, OH, CN, NO₂, carbamoyl, alkanoyl, alkoxy carbonyl, amino deriv. {n = 0-3}; X = substituted CH₂, CO, O, C:NOR₇ {R₇ = H or alkyl}, NR₈ {R₈ = H, (un)substituted alkyl or Ph}, $(\text{CH}_2)^n$ {n = 1-3}, S(O)_p {p = 0-2}; R₃, R₄, R₅ or R₆ = H, halo, (un)substituted alkyl, (un)substituted alkoxy, (un)substituted phenoxy, OH, COR_c {R_c = OH, alkoxy or amino deriv.}, alkanoyl, NO₂, (un)substituted phenylalkyl, (un)substituted phenylalkoxy, CN, (un)substituted alkenyl or alkynyl, etc.; R_a or R_b = H, (un)substituted alkyl, alkanoyl or alkylsulfonyl) and their pharmaceutically acceptable salts were prep'd. as inhibitors of protein kinase activity. Pharmaceutical compns. contg. the pyrazoles and processes for prep. them are also disclosed. Thus, compd. II was obtained in six steps from indan-1-one with pyrazole ring formation via reaction of hydrazine hydrate with intermediate 4-(1-oxospiro[indan-2,2'-oxiran]-3'-yl)benzoic acid in the presence of glacial AcOH. All exemplified compds. significantly inhibited KDR kinase at concns. of $\leq 50 \mu\text{M}$.

IT 362611-38-9P

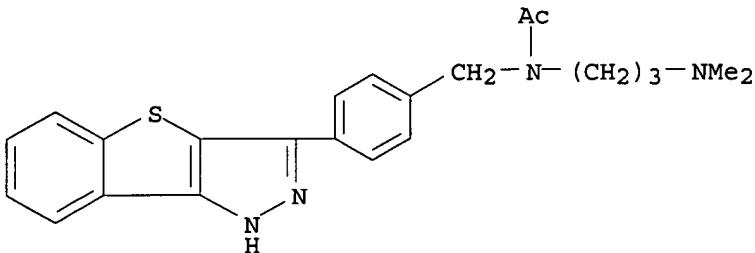
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep. of substituted 1,4-dihydroindeno[1,2-c]pyrazoles as tyrosine kinase inhibitors)

RN 362611-38-9 CA

CN Acetamide, N-[[4-(1H-[1]benzothieno[3,2-c]pyrazol-3-yl)phenyl]methyl]-N-[3-

10/019, 993

(dimethylamino)propyl] - (9CI) (CA INDEX NAME)



IT 362611-38-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of substituted 1,4-dihydroindeno[1,2-c]pyrazoles as tyrosine kinase inhibitors)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 9 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 135:152714 CA

TITLE: Preparation of aromatic amines and amides useful as melanocortin receptor agonists and antagonists

INVENTOR(S): Lundstedt, Torbjorn; Skottner, Anna; Seifert, Elisabeth; Andersson, Per; Kaulina, Larisa; Dikovskaya, Klara; Mutule, Ilze; Mutulis, Felikss; Wikberg, Jarl; Starchenkov, Igor; Kreicberga, Jana

PATENT ASSIGNEE(S): Melacure Therapeutics AB, Swed.; Pett, Christopher Phineas; et al.

SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|--------------|-----------------|----------|
| WO 2001055107 | A2 | 20010802 | WO 2001-GB356 | 20010129 |
| WO 2001055107 | A3 | 20020117 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| PRIORITY APPLN. INFO.: | | GB 2000-2056 | A 20000128 | |
| | | GB 2000-2058 | A 20000128 | |

OTHER SOURCE(S): MARPAT 135:152714

AB The present invention relates to arom. amines and amides (I; B-E-N(R)-X-F-A and pharmacol. active salts thereof) and to the use of these compds. for the treatment of obesity, anorexia, inflammation, mental disorders and other diseases assocd. with the melanocortin receptors or related systems, e.g. the melanocyte stimulating hormones.

In I: X is carbonyl, methylene or is absent (i.e. it is a single bond); E and F are independently a satd. or unsatd., straight or branched chain acyclic hydrocarbon group having 1-10 C atoms, or E and/or F may be absent. R is -P-R4, -C(O)-D-R' (P and D are independently a satd. or unsatd., straight or branched chain acyclic hydrocarbon group having 1-10 C atoms; or D is absent (i.e. D is a single bond); R4 is hydroxy, cyclohexyl, cyclopentyl, guanidine, aminoguanidine, carboxy; R' is hydroxy, Me, cyclohexyl, cyclopentyl, guanidine, aminoguanidine, carboxy; or R4 or R' = (possibly substituted) amino, carbamoyl, alkoxy, alkoxy carbonyl, acyl, morpholinyl, pyrrolidinyl, piperidinyl; or R4 may be A and B as defined below). A and B are the same or different and are (possibly substituted) quinolinyl, imidazolyl, pyrazinyl, isoquinolinyl, cyclopentadienyl, pyridinyl, Ph, pyrimidinyl, pyrrolyl, isoindolyl, naphthyl, indolyl, indenyl. Several claimed compds. (N-(3-aminopropyl)-3-(1H-indol-3-yl)-N-(1,2,3,4-tetrahydronaphthalen-2-yl)propionamide, N-(5-aminopentyl)-N-(2-chloro-3-phenylallyl)-4-(1H-indol-3-yl)butyramide, [2-(1H-indol-3-yl)ethyl]bis(3-phenylpropyl)amine hydrochloride, 4-guanidino-N-[2-(1H-Indol-3-yl)ethyl]-N-(4-methoxybenzyl)butyramide hydrochloride) were tested (results given) for affinity for melanocortin receptors (MC1, MC3, MC4, MC5) and/or influence on cAMP. Anti-inflammatory effects were tested (results given) for [2-(1H-indol-3-yl)ethyl]bis(3-phenylpropyl)amine hydrochloride. Also claimed is a process for the prodn. of the claimed compds. wherein R-Y is reacted with B-E-NH-X-F-A, preferably using a std. N-alkylation procedure. Two example preps. are given. In one example, to a soln. of 4-N-benzylbutylguanidine (10 mmol) in MeCN (15 mL) under stirring was added 1,3-bis(benzylloxycarbonyl)-2-methylthiopseudourea (10 mmol). Stirring was continued for 24 h at room temp., the reaction mixt. concd. in vacuo, purified by chromatog. (silica gel; Et acetate) to give a viscous oil (90 %). To a soln. of the above oil (N-(4-benzylaminobutyl)-N',N''-bis(benzylloxycarbonyl)guanidine) (0.5 mmol) and 3-(1H-indol-3-yl)propionic acid 2,5-dioxopyrrolidin-1-yl ester (0.5 mmol) in MeCN (10 mL) under stirring satd. NaHCO₃ soln. until pH 9 was added, stirred for 2 days at room temp., evapd. in vacuo. The residue was dissolved in Et acetate (12 mL), washed with H₂O (2x5 mL), dried (MgSO₄) and evapd. in vacuo. To the crude intermediate dissolved in EtOH (10 mL), 5% Pd/C (20 mg) and 4 drops of concd. HCl were added and hydrogenated for 1 h at ambient pressure; the Pd catalyst was filtered off, the soln. evapd. in vacuo, and the residue purified by chromatog. (silica gel; chloroform-MeOH-H₂O, 120:20:1) to give N-benzyl-N-(4-guanidinobutyl)-2-(1H-indol-3-yl)acetamide hydrochloride (47 %) as a colorless foam.

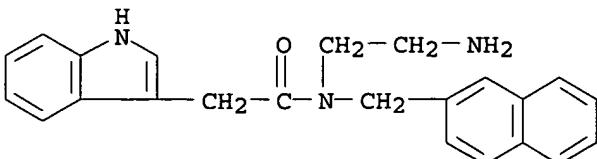
IT

352291-96-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of arom. amines and amides useful as melanocortin receptor agonists and antagonists)

RN

352291-96-4 CA

CN

1H-Indole-3-acetamide, N-(2-aminoethyl)-N-(2-naphthalenylmethyl) - (9CI)
 (CA INDEX NAME)

IT 352291-96-4P 352292-00-3P 352292-06-9P

10/019,993

352292-08-1P 352292-99-0P 352293-01-7P
352293-03-9P 352293-05-1P 352293-07-3P
352293-09-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of arom. amines and amides useful as melanocortin receptor agonists and antagonists)

L15 ANSWER 10 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 135:152713 CA

TITLE: Aromatic amides as novel melanocortin receptor agonists and antagonists

INVENTOR(S): Lundstedt, Torbjörn; Skottner, Anna; Seifert, Elisabeth; Starchenkov, Igor; Trapencieris, Peteris; Kauss, Valerjans; Kalvins, Ivars; Boman, Arne

PATENT ASSIGNEE(S): Melacure Therapeutics AB, Swed.

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001055106 | A2 | 20010802 | WO 2001-GB346 | 20010129 |
| WO 2001055106 | A3 | 20020321 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| BR 2001007893 | A | 20021105 | BR 2001-7893 | 20010129 |
| EP 1254114 | A2 | 20021106 | EP 2001-946850 | 20010129 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| PRIORITY APPLN. INFO.: | | | GB 2000-1948 | A 20000128 |
| | | | GB 2000-2060 | A 20000128 |
| | | | WO 2001-GB346 | W 20010129 |

OTHER SOURCE(S): MARPAT 135:152713

AB The present invention relates to novel arom. amides (I; B-E-X-N(R8)-C(O)-Y-F-A and pharmacol. active salts thereof) and to the use of these amides for the treatment of obesity, anorexia, inflammation, mental disorders and other diseases assocd. with the melanocortin receptors or related systems, e.g. the melanocyte stimulating hormones. In I: E and F are independently a satd. or unsatd., acyclic hydrocarbon group having 1-5 C atoms. X and Y are independently methylene; one of X and Y are absent (i.e. a single bond); or X can be -CH(QR10)- and/or Y can be -CH(MR9)- (M and Q are independently a satd. or unsatd., straight or branched chain acyclic hydrocarbon group with 1-6 C atoms; or M and/or Q are absent (i.e. M and/or Q are single bonds)). R8, R9 and R10 are H, -PR4, -C(O)DR4 (P and D are independently a satd. or unsatd., straight or branched chain acyclic hydrocarbon group having 1-6 C atoms; or D is absent (i.e. D is a single bond)). R4 is hydroxy, Me, cyclohexyl, cyclopentyl, aminoguanidine, guanidine, carboxy, or (possibly

10/019,993

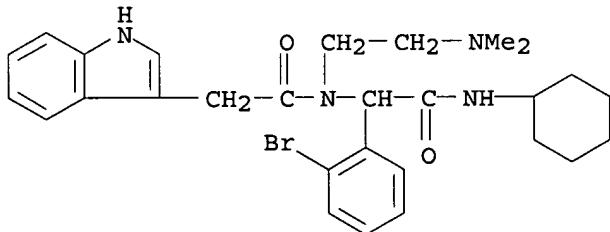
substituted) amino, carbamoyl, alkoxy, alkoxycarbonyl, acyl, morpholinyl, pyrrolidinyl, piperidinyl, piperazinyl, Ph, isoindolyl, indenyl, pyridinyl, indolyl, pyrrolyl, cyclopentadienyl wherein R4 in R8, R9 and R10 may be the same or different. A and B are the same or different and are (possibly substituted) quinolinyl, isoquinolinyl, isoindolyl, naphthyl, pyridinyl, indolyl, pyrazinyl, cyclopentadienyl, pyrimidinyl, Ph, indenyl. Several claimed compds. (N-(3-aminopropyl)-3-(1H-indol-3-yl)-2-(2-naphthalen-1-ylacetyl)amino)propionamide hydrochloride (1:1.2), N-[1-[benzyl(4-guanidinobutyl)carbamoyl]-2-(1H-indol-3-yl)ethyl]-4-phenylbutyramide monohydrochloride, N-benzyl-N-(4-guanidinobutyl)-3-(1H-indol-3-yl)-2-(2-naphthalen-2-ylacetyl)amino)propionamide monohydrochloride, N-[1-(9-ethyl-9H-carbazol-3-ylcarbamoyl)-2-(1H-indol-3-yl)ethyl]-4-guanidinobutyramide monohydrochloride, 4-amino-N-[1-(9-ethyl-9H-carbazol-3-ylcarbamoyl)-2-(1H-indol-3-yl)ethyl]butyramide monohydrochloride, 2-(3-aminopropionylamino)-N-(9-ethyl-9H-carbazol-3-yl)-3-(1H-indol-3-yl)propionamide monohydrochloride (results given) for affinity for melanocortin receptors (MC1, MC3, MC4, MC5) and/or influence on cAMP. In vivo effects on food intake and anti-inflammatory effects were also detd. on selected compds. Two example preps. are given.

IT 352277-26-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(arom. amides as novel melanocortin receptor agonists and antagonists and their prepn.)

RN 352277-26-0 CA

CN 1H-Indole-3-acetamide, N-[1-(2-bromophenyl)-2-(cyclohexylamino)-2-oxoethyl]-N-[2-(dimethylamino)ethyl] - (9CI) (CA INDEX NAME)



IT 352277-26-0P 352277-28-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(arom. amides as novel melanocortin receptor agonists and antagonists and their prepn.)

L15 ANSWER 11 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER:

135:117245 CA

TITLE:

Substance P receptor antagonist and optional magnesium compound for the treatment of brain, spinal and nerve injury

INVENTOR(S):

Vink, Robert; Nimmo, Alan John

PATENT ASSIGNEE(S):

James Cook University, Australia

SOURCE:

PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

10/019,993

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2001052844 | A1 | 20010726 | WO 2001-AU46 | 20010118 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001026560 | A5 | 20010731 | AU 2001-26560 | 20010118 |
| BR 2001007695 | A | 20021015 | BR 2001-7695 | 20010118 |
| EP 1261335 | A1 | 20021204 | EP 2001-901048 | 20010118 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| NO 2002003423 | A | 20020916 | NO 2002-3423 | 20020717 |
| PRIORITY APPLN. INFO.: | | | AU 2000-5146 | A 20000118 |
| | | | WO 2001-AU46 | W 20010118 |

AB A treatment for brain, spinal, and nerve injury comprises use of a substance P receptor antagonist optionally in combination with a magnesium compd. Also provided is a formulation for use in the treatment comprising a substance P receptor antagonist and a magnesium compd.

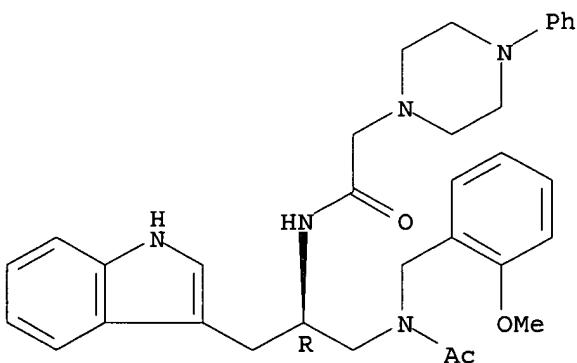
IT 170566-51-5, LY-303241

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substance P receptor antagonist and optional magnesium compd. for treatment of brain, spinal and nerve injury)

RN 170566-51-5 CA

CN 1-Piperazineacetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-4-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-51-5, LY-303241 170566-84-4, LY-303870

170567-08-5, LY-306740

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(substance P receptor antagonist and optional magnesium compd. for treatment of brain, spinal and nerve injury)

10/019, 993

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 135:111983 CA
TITLE: NK1-Receptor antagonists for the treatment of the
restless leg syndrome
INVENTOR(S): Brecht, Hans-Michael; Jung, Birgit
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma K.-G., Germany
SOURCE: Ger. Offen., 4 pp.
CODEN: GWXXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

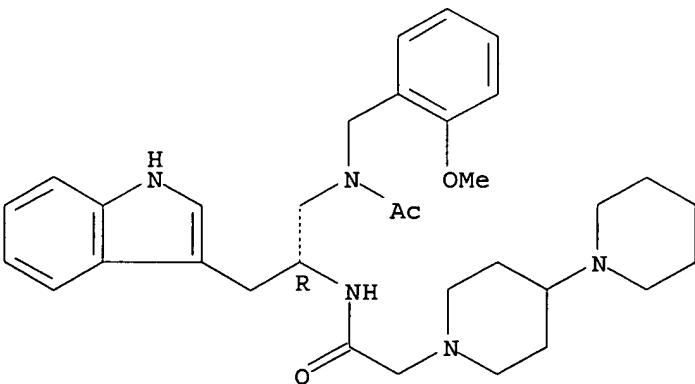
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|--------------------|----------|
| DE 10001785 | A1 | 20010719 | DE 2000-10001785 | 20000118 |
| WO 2001052854 | A1 | 20010726 | WO 2001-EP263 | 20010111 |
| W: CA, JP, MX, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, TR | | | | |
| US 2001034320 | A1 | 20011025 | US 2001-764629 | 20010118 |
| PRIORITY APPLN. INFO.: | | | DE 2000-10001785 A | 20000118 |
| | | | US 2000-180399P P | 20000204 |

AB The invention concerns the use from NK1-receptor antagonists for the prodn. of a drug for the treatment of the restless leg syndrome. The drugs are selected from e.g., Neuronorm, BIF 1149, FK 888, SR 48968, SR 140333, and LY 303870. Opioids, .alpha.2-adrenoceptor agonists, and Antiparkinsonian agents may be used in conjunction with NK1-receptor antagonists.

IT 170566-84-4, LY 303870
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NK1-receptor antagonists for treatment of restless leg syndrome)

RN 170566-84-4 CA
CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, LY 303870
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

10/019,993

(NK1-receptor antagonists for treatment of restless leg syndrome)

L15 ANSWER 13 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 134:218936 CA
TITLE: Crystal structure of CDC25 proteins and its use in rational design of inhibitors
INVENTOR(S): Taylor, Neil R.; Borhani, David; Epstein, David; Rudolph, Johannes; Ritter, Kurt; Fujimori, Taro; Robinson, Simon; Eckstein, Jens; Haupt, Andreas; Walker, Nigel; Dixon, Richard W.; Choquette, Deborah; Blanchard, Jill; Kluge, Arthur; Pal, Kollol; Bockovich, Nicholas; Come, Jon; Hediger, Mark
PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 314 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2001016300 | A2 | 20010308 | WO 2000-US23473 | 20000825 |
| WO 2001016300 | A3 | 20020530 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1226237 | A2 | 20020731 | EP 2000-959449 | 20000825 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |

PRIORITY APPLN. INFO.: US 1999-172215P P 19990831
WO 2000-US23473 W 20000825

OTHER SOURCE(S): MARPAT 134:218936

AB The present invention relates to polypeptides which comprise the ligand binding domain of CDC25, cryst. forms of these polypeptides, and the use of these cryst. forms to det. the 3-dimensional structure of the catalytic domain of CDC25 alone and in complexes with pentapeptide inhibitors. At. coordinates are provided from x-ray diffraction of crystals of CDC25A and CDC25B catalytic domains in the presence and absence of various inhibitors. The invention also relates to the use of the 3-dimensional structure of the CDC25 catalytic domain in methods of designing and/or identifying potential inhibitors of CDC25 activity, for example, compds. which inhibit the binding of a native substrate to the CDC25 catalytic domain. The method comprises the steps of (1) identifying one or more functional groups capable of interacting with one or more subsites of the CDC25 catalytic domain, and (2) identifying a scaffold which presents the functional group or functional groups in a suitable orientation for interacting with one or more subsites of the CDC25 catalytic domain. Since CDC25 is a potential target for therapies aimed at controlling proliferative disease, the at. coordinates allow rational structure-based design of potential agents for the treatment of cancer, restenosis, reocclusion of coronary artery, or inflammation.

IT 329276-18-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological

10/019, 993

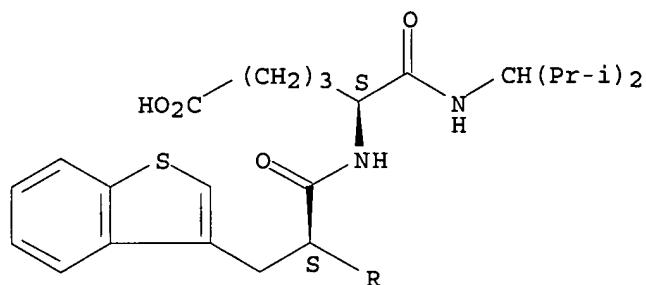
study); PREP (Preparation); USES (Uses)
(crystal structure of CDC25 proteins and its use in rational design of
inhibitors)

RN 329276-18-8 CA

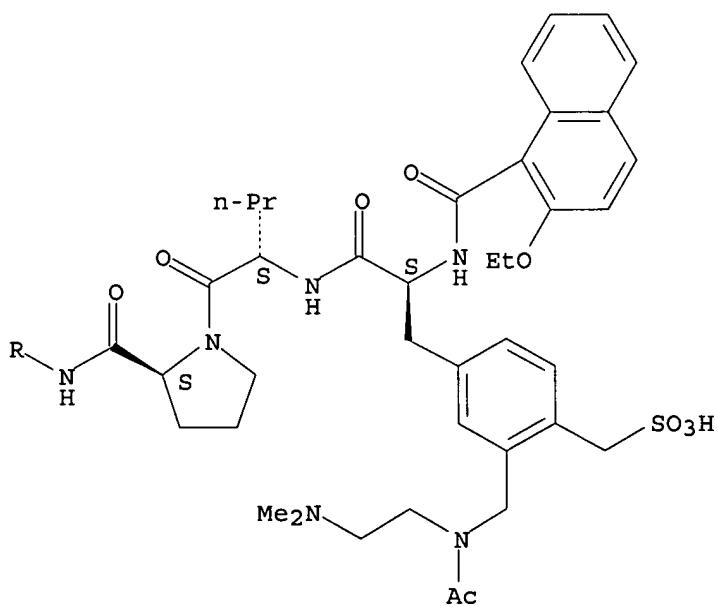
CN L-Norvalinamide, 3-[[acetyl[2-(dimethylamino)ethyl]amino]methyl]-N-[(2-ethoxy-1-naphthalenyl)carbonyl]-4-(sulfomethyl)-L-phenylalanyl-L-norvalyl-L-prolyl-3-benzo[b]thien-3-yl-L-alanyl-5-carboxy-N-[2-methyl-1-(1-methylethyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



IT 329276-18-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(crystal structure of CDC25 proteins and its use in rational design of
inhibitors)

L15 ANSWER 14 OF 65 CA COPYRIGHT 2003 ACS

10/019, 993

ACCESSION NUMBER: 134:168313 CA
TITLE: Targeting multimeric imaging agents through multilocus binding
INVENTOR(S): Lauffer, Randall B.; McMurry, Thomas J.; Dumas, Stephane; Kolodziej, Andrew; Amedio, John; Caravan, Peter; Zhang, Zhaoda; Nair, Shrikumar
PATENT ASSIGNEE(S): Epix Medical, Inc., USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIIXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|---|----------|
| WO 2001008712 | A2 | 20010208 | WO 2000-US20536 | 20000728 |
| WO 2001008712 | A3 | 20020314 | | |
| | | | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | |
| | | | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | |
| BR 2000013171 | A | 20020528 | BR 2000-13171 | 20000728 |
| EP 1210124 | A2 | 20020605 | EP 2000-950815 | 20000728 |
| | | | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | |
| NO 2002000474 | A | 20020327 | NO 2002-474 | 20020129 |
| PRIORITY APPLN. INFO.: | | | US 1999-146414P P 19990729 | |
| | | | US 1999-163650P P 19991104 | |
| | | | WO 2000-US20536 W 20000728 | |

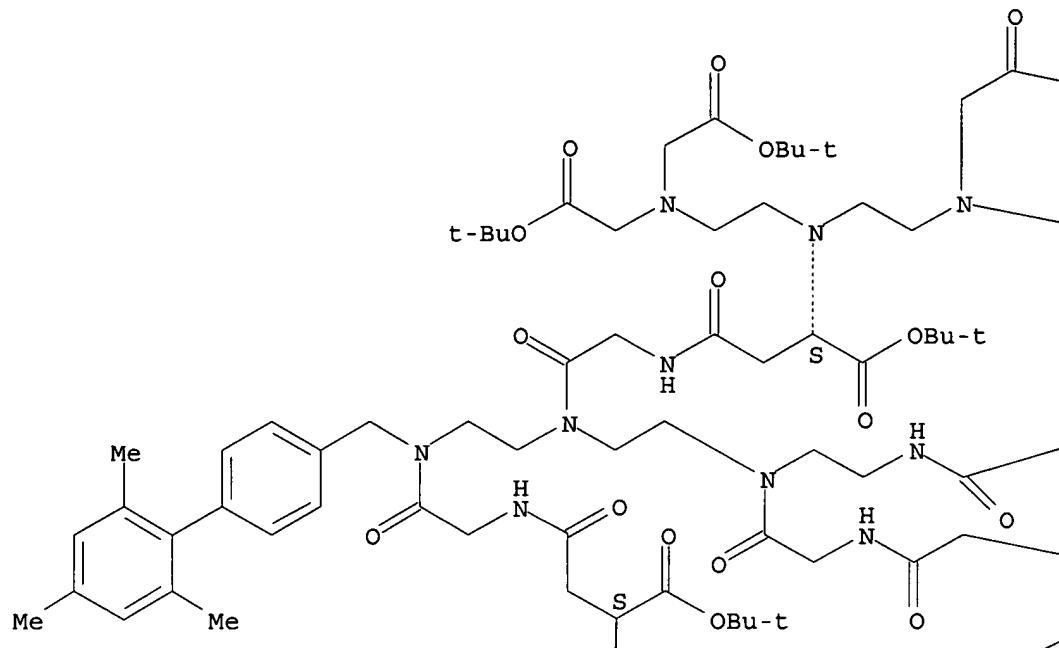
AB The present invention relates to contrast agents for diagnostic imaging. In particular, this invention relates to novel multimeric compds. which exhibit improved relaxivity properties upon binding to endogenous proteins or other physiol. relevant sites. The compds. consist of: a) two or more Image Enhancing Moieties (IEMs) (or signal-generating moiety) comprising multiple subunits; b) two or more Target Binding Moieties (TBMs), providing for in vivo localization and multimer rigidification; c) a scaffold framework for attachment of the above moieties; and d) optional linkers for attachment of the IEMs to scaffold. This invention also relates to pharmaceutical compns. comprising these compds. and to methods of using the compds. and compns. for contrast enhancement of diagnostic imaging.

IT 325140-34-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(targeting multimeric imaging agents through multilocus binding)

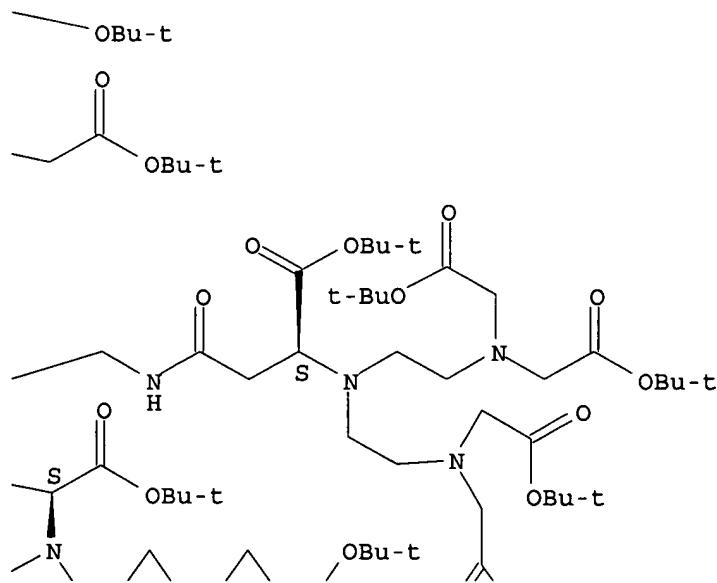
RN 325140-34-9 CA
CN Glycine, N,N-bis[2-[bis[2-(1,1-dimethylethoxy)-2-oxoethyl]amino]ethyl]-L-.beta.-aspartyl-, 1-(1,1-dimethylethyl) ester, 2,2',2'',2'''-tetraamide with N-(2-aminoethyl)-N'-(2-[[2',4',6'-trimethyl[1,1'-biphenyl]-4-yl)methyl]amino]ethyl]-1,2-ethanediamine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

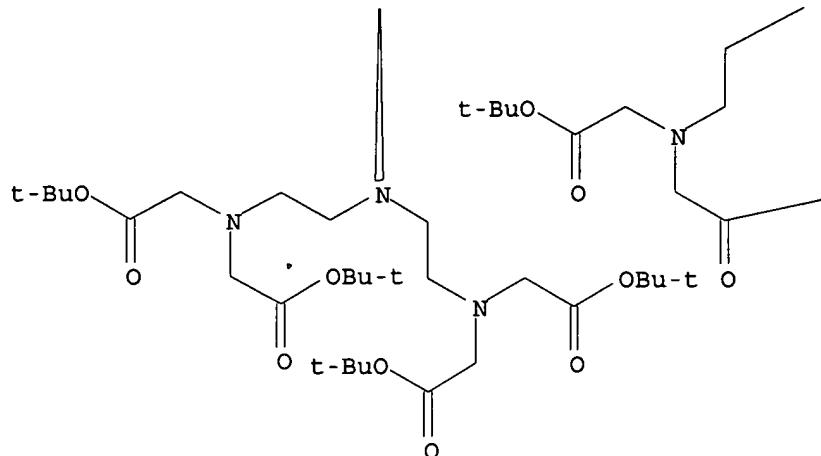


PAGE 1-B

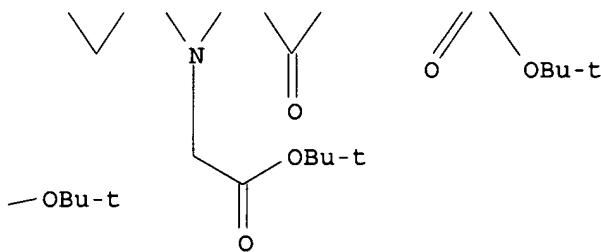


10/019,993

PAGE 2-A



PAGE 2-B



IT 325140-34-9P 325140-35-0P 325140-38-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(targeting multimeric imaging agents through multilocus binding)
IT 325140-35-0DP, gadolinium complex 325140-38-3DP,
gadolinium complex
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
(targeting multimeric imaging agents through multilocus binding)

L15 ANSWER 15 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER:

134:116237 CA

TITLE:

Preparation of bradykinin B1 receptor antagonists

INVENTOR(S):

Ohlmeyer, Michael H. J.; Baldwin, John J.; Dolle,
Roland E., III; Paradkar, Vidyadhar; Quintero, Jorge
Gabriel; Pan, Gonghua

PATENT ASSIGNEE(S):

Pharmacopeia, Inc., USA

SOURCE:

PCT Int. Appl., 231 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|-------|-----------------|-------|
| ----- | ----- | ----- | ----- | ----- |

10/019, 993

WO 2001005783 A1 20010125 WO 2000-US19185 20000714
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1196411 A1 20020417 EP 2000-950343 20000714
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1999-143990P P 19990715
WO 2000-US19185 W 20000714

OTHER SOURCE(S): MARPAT 134:116237

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. I [X, Y, Z = CH or N; A = A1 or A2, where A1 is R4R5NCO (R4 = H, aryl, heteroaryl, substituted alkyl; R5 = H, alkyl), 5-aryl-1,2,4-triazol-3-yl, 2-aryl-4-imidazolyl, or 2-aryl-5-thiazolyl and A2 is R7CONH (R7 = aryl or alkylaryl), R7SO2NH, R4NH, R4O; Q = heteroaryl, aryl, CH2R13 (R13 = OH, OTHP, 1-imidazolyl, 1-pyrrolyl), CH:NOMe, or 1,3-dithian-2-yl; W = H, Cl, F, alkyl, aryl, heteroaryl, alkoxy, alkylthio, an amino group, arylcarbamoyl, etc.; R1 = alkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, etc.; R2 = H or alkyl or R1R2C is a ring optionally contg. O, S or N; R3 = H or alkyl, or when n is zero, R2 and R3 taken together form a 6-membered ring (with provisos) were prepd. as bradykinin B1 receptor antagonists. Thus, D-leucine deriv. II was prepd. by substitution reaction of D-leucine 4-chlorobenzylamide with 2,4-dichloro-(or difluoro)-6-(1H-imidazol-1-yl)pyrimidine and then 3-chlorobenzylamine. Pharmaceutical formulations contg. II are described.

IT 321328-80-7P

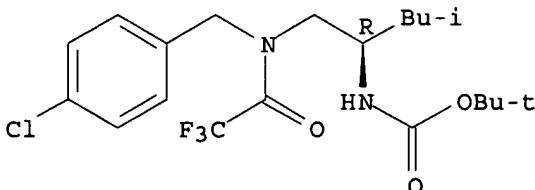
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of bradykinin B1 receptor antagonists)

RN 321328-80-7 CA

CN Carbamic acid, [(1R)-1-[[[[(4-chlorophenyl)methyl](trifluoroacetyl)amino]methyl]-3-methylbutyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 321328-80-7P 321328-82-9P 321328-84-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of bradykinin B1 receptor antagonists)

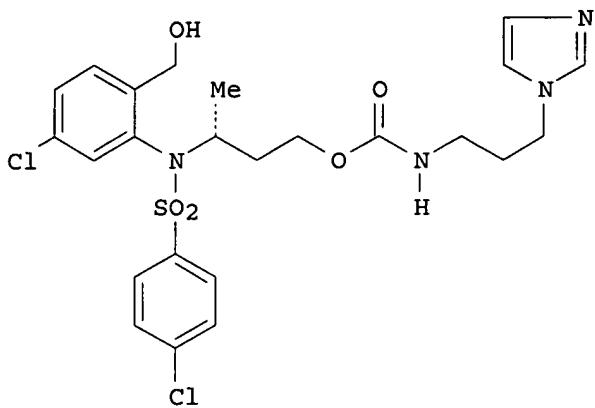
10/019,993

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 133:207678 CA
TITLE: Preparation of sulfonamide derivs. as amyloid .beta. production inhibitors useful in treating or preventing diseases related to A.beta.
INVENTOR(S): Smith, David W.; Munoz, Benito; Srinivasan, Kumar; Bergstrom, Carl P.; Chaturvedula, Prasad V.; Deshpande, Milind S.; Keavy, Daniel J.; Lau, Wai Yu; Parker, Michael F.; Sloan, Charles P.; Wallace, Owen B.; Wang, Henry Hui
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Bristol-Myers Squibb Company
SOURCE: PCT Int. Appl., 377 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2000050391 | A1 | 20000831 | WO 2000-US4560 | 20000222 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1159263 | A1 | 20011205 | EP 2000-910293 | 20000222 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 2000008965 | A | 20020226 | BR 2000-8965 | 20000222 |
| JP 2002537376 | T2 | 20021105 | JP 2000-600975 | 20000222 |
| NO 2001004135 | A | 20010927 | NO 2001-4135 | 20010824 |
| PRIORITY APPLN. INFO.: | | | US 1999-121906P | P 19990226 |
| | | | US 1999-122746P | P 19990226 |
| | | | US 1999-122748P | P 19990226 |
| | | | US 1999-130994P | P 19990423 |
| | | | US 1999-130995P | A2 19990423 |
| | | | WO 2000-US4560 | W 20000222 |

OTHER SOURCE(S): MARPAT 133:207678
GI



I

AB Title compds. [(D)(G)CHN(E)SO₂(J); D = H, alkyl, heterocycle, halo, alkoxy, ester, amide; G = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, cycloalkynyl, (CHR₁)_nO(CHR₂)_mCONR₃R₄, heterocycle, aryl, amine, amide, ester, ether, carbamate; D-G = cyclic; n = 1, 2, 3, 4; m = 0, 1, 2, 3, 4; R₁, R₂, R₃, R₄ are independently H, alkyl; R₃-R₄ = cyclic; E = H, alkyl, alkenyl, alkynyl, heterocycle, aryl, alkoxy, amide, sulfonyl, sulfonamidyl, sulfide; J = alkyl, alkenyl, alkynyl, aryl, heterocycle, polycyclic; J-E = cyclic], pharmaceutically acceptable salts, and compn. comprising title compds. are prep'd. Title compds. can act to modulate prodn. of amyloid .beta. protein (APP751, APP695wt, APP670/671, APP670/671/717, sAPP, .alpha.-sAPP, .beta.-sAPP) and are useful in the prevention or treatment of a variety of diseases; such diseases are amyloid angiopathy, cerebral amyloid angiopathy, systemic amyloidosis, Alzheimer's disease, hereditary cerebral hemorrhage with amyloidosis of the Dutch type, inclusion body myositis, and Down's syndrome. Thus, the title compd. I was prep'd. and tested.

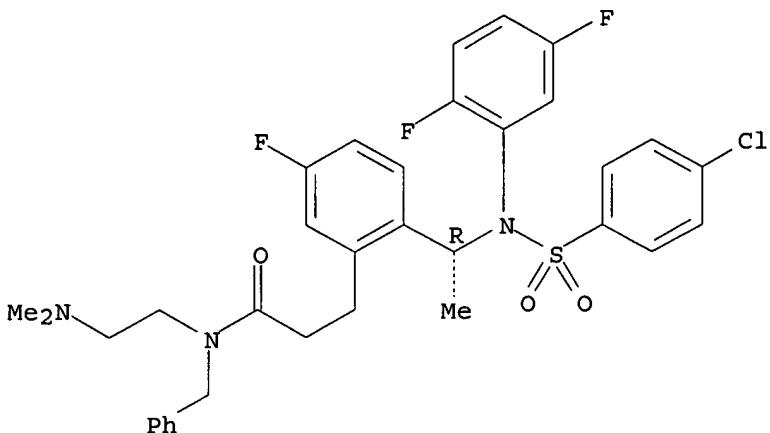
IT 290316-78-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep'n. of sulfonamide derivs. as amyloid .beta. prodn. inhibitors useful in treating or preventing diseases related to A.beta.)

RN 290316-78-8 CA

CN Benzenepropanamide, 2-[(1R)-1-[[[4-chlorophenyl]sulfonyl](2,5-difluorophenyl)amino]ethyl]-N-[2-(dimethylamino)ethyl]-5-fluoro-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 290316-78-8P 290320-69-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of sulfonamide derivs. as amyloid .beta. prodn. inhibitors useful in treating or preventing diseases related to A.beta.)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 133:202575 CA

TITLE: Identification of new Cdc25 dual specificity phosphatase inhibitors in a targeted small molecule array

AUTHOR(S): Ducruet, A. P.; Rice, R. L.; Tamura, K.; Yokokawa, F.; Yokokawa, S.; Wipf, P.; Lazo, J. S.

CORPORATE SOURCE: Combinatorial Chemistry Center and the Molecular Therapeutic/Drug Discovery Program of the University of Pittsburgh Cancer Institute, Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA, 15261, USA

SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(6), 1451-1466

PUBLISHER: CODEN: BMECEP; ISSN: 0968-0896
 Elsevier Science Ltd.

DOCUMENT TYPE: Journal
 LANGUAGE: English

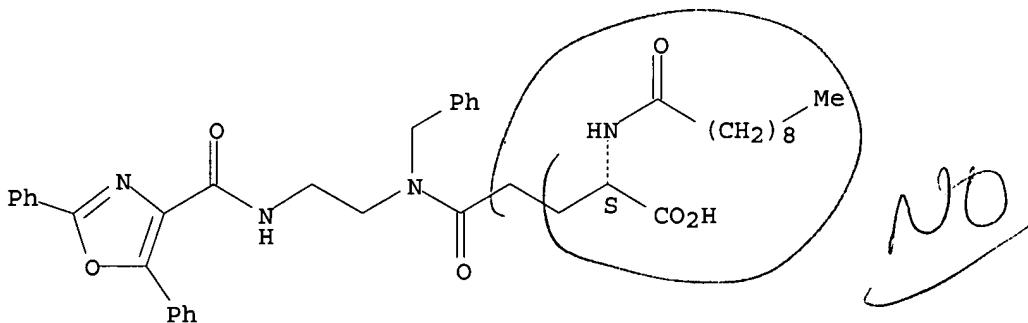
AB Dual specificity protein phosphatases (DSPases) are key regulators of signal transduction, oncogenesis and the cell cycle. Few potent or specific inhibitors of DSPases, however, are readily available for these pharmacol. targets. The authors have used a combinatorial/parallel synthetic approach to rigidify the variable core region and modify the side chains of 4-(benzyl-[2-(2,5-diphenyl-oxazole-4-carbonyl)-amino]-ethyl)-carbamoyl-2-decanoylamino butyric acid (or SC-.alpha..alpha..delta.9), which is the most active element in a previously described library of phosphatase inhibitors (Rice, R. L.; Rusnak, J. M.; Yokokawa, F.; Yokokawa, S.; Messner, D. J.; Boynton, A. L.; Wipf, P.; Lazo, J. S. Biochem. 1997, 36, 15965). Several analogs were identified as effective inhibitors of the protein tyrosine phosphatase (PTPase) PTP1B and the DSPases VHR and Cdc25B2. Two compds., FY3-.alpha..alpha..09 and FY21-.alpha..alpha..09, were partial competitive inhibitors of Cdc25B2 with Ki values of 7.6 and 1.6 .mu.M, resp.

FY21-.alpha..alpha.09 possessed only moderate activity against PTP1B. Consistent with its in vitro anti-phosphatase activity, FY21-.alpha..alpha.09 inhibited growth in MDA-MB-231 and MCF-7 human breast cancer cell lines. FY21-.alpha..alpha.09 also inhibited the G2/M transition in tsFT210 cells, consistent with Cdc25B inhibition. Several architectural requirements for DSPase inhibition were revealed through modification of the side chain moieties or variable core region of the **pharmacophore**, which resulted in decreased compd. potency. The structure of FY21-.alpha..alpha.09 provides a useful platform from which addnl. potent and more highly selective phosphatase inhibitors might be generated.

IT 188403-19-2, (S)-SC-.alpha..alpha..delta. 9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (identification of new Cdc25 dual specificity phosphatase inhibitors in a targeted small mol. array in relation to structure and lipophilicity and breast cancer inhibition and effect on cell cycle)

RN 188403-19-2 CA
 CN L-Glutamine, N-[2-[(2,5-diphenyl-4-oxazolyl)carbonyl]amino]ethyl]-N2-(1-oxodecyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 188403-19-2, (S)-SC-.alpha..alpha..delta. 9 290330-18-6,
 (R)-SC-.alpha..alpha..delta. 9 290330-20-0, SC-.alpha..alpha..delta. 15
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (identification of new Cdc25 dual specificity phosphatase inhibitors in a targeted small mol. array in relation to structure and lipophilicity and breast cancer inhibition and effect on cell cycle)

IT 219857-86-0P, SC-.alpha..alpha..delta.4III 219905-92-7P,
 SC-.alpha..alpha..delta.6III 290330-45-9P, SC-.alpha..alpha..delta. 17A 290330-47-1P, SC-.alpha..alpha..delta. A
 17B 290330-48-2P, SC-.alpha..alpha..delta.A
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (identification of new Cdc25 dual specificity phosphatase inhibitors in a targeted small mol. array in relation to structure and lipophilicity and breast cancer inhibition and effect on cell cycle)

IT 289906-18-9P 289906-19-0P 289906-20-3P
 289906-21-4P 289906-22-5P 289906-24-7P
 289906-25-8P 289906-26-9P 289906-27-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (identification of new Cdc25 dual specificity phosphatase inhibitors in

10/019,993

a targeted small mol. array in relation to structure and lipophilicity and breast cancer inhibition and effect on cell cycle)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 133:202574 CA

TITLE: New anti-HIV derivatives: synthesis and antiviral evaluation

AUTHOR(S): De Michelis, C.; Rocheblave, L.; Priem, G.; Chermann, J. C.; Kraus, J. L.

CORPORATE SOURCE: Faculte des Sciences de Luminy, Laboratoire de Chimie Biomoleculaire, Universite de la Mediterranee, Marseille, 13288, Fr.

SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(6), 1253-1262

CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

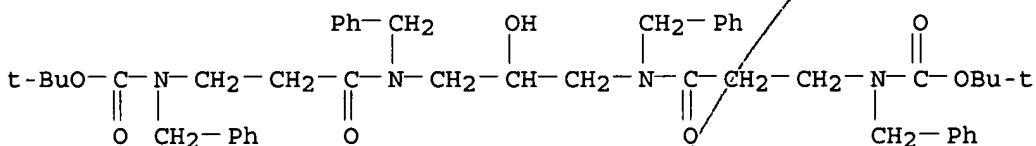
AB A small focused library of 18 compds. incorporating the motif 1,3-(N,N'-dibenzyl)diamino-2-propanol has been synthesized, using adapted synthetic methodologies. These series of compds. were evaluated for their in vitro anti-HIV activity on infected MT4 cells (syncytium formation observation). Some of the new synthesized compds. show potent anti-HIV activities. EC50 values for compds. (31, 40, 34, 37 and 46) range from 0.1 to 1 .mu.M. In order to det. at which level these new derivs. interfere with the HIV replicative cycle, inhibition assays on recombinant HIV protease and HIV integrase have been performed. None of the compds. were found active on these two enzymic targets. Expts. are in progress in order to identify their biol. target within the HIV replicative cycle.

IT 289889-18-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(new anti-HIV derivs.)

RN 289889-18-5 CA

CN 2,6,10,14-Tetraazapentadecanedioic acid, 8-hydroxy-5,11-dioxo-2,6,10,14-tetrakis(phenylmethyl)-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



IT 289889-18-5P 289889-19-6P 289889-20-9P

289889-21-0P 289889-22-1P 289889-23-2P

289889-24-3P 289889-25-4P 289889-26-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(new anti-HIV derivs.)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 133:99443 CA

10/019, 993

TITLE: **Pharmacological blockade or genetic deletion of substance P (NK1) receptors attenuates neonatal vocalization in guinea-pigs and mice**

AUTHOR(S): Rupniak, N. M. J.; Carlson, E. C.; Harrison, T.; Oates, B.; Seward, E.; Owen, S.; de Felipe, C.; Hunt, S.; Wheeldon, A.

CORPORATE SOURCE: Merck Sharp and Dohme Neuroscience Research Centre, Essex, CM20 2QR, UK

SOURCE: **Neuropharmacology (2000), 39(8), 1413-1421**
CODEN: NEPHBW; ISSN: 0028-3908

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The regulation of stress-induced vocalizations by central NK1 receptors was investigated using **pharmacol.** antagonists in guinea-pigs, a species with human-like NK1 receptors, and transgenic NK1R^{-/-} mice. In guinea-pigs, i.c.v. infusion of the selective substance P agonist GR73632 (0.1 nmol) elicited a pronounced vocalization response that was blocked enantioselectively by the NK1 receptor antagonists CP-99,994 and L-733,060 (0.1-10 mg/kg). GR73632-induced vocalizations were also markedly attenuated by the antidepressant drugs imipramine and fluoxetine (30 mg/kg), but not by the benzodiazepine anxiolytic diazepam (3 mg/kg) or the 5-HT1A agonist buspirone (10 mg/kg). Similarly, vocalizations in guinea-pig pups sep'd. from their mothers were blocked enantioselectively by the highly brain-penetrant NK1 receptor antagonists L-733,060 and GR205171 (ID50 3 mg/kg), but not by the poorly brain-penetrant compds. LY303870 and CGP49823 (30 mg/kg). Sepn.-induced vocalizations were also blocked by the anxiolytic drugs diazepam, chlordiazepoxide and buspirone (ID50 0.5-1 mg/kg), and by the antidepressant drugs phenelzine, imipramine, fluoxetine and venlafaxine (ID50 3-8 mg/kg). In normal mouse pups, GR205171 attenuated neonatal vocalizations when administered at a high dose (30 mg/kg) only, consistent with its lower affinity for the rat than the guinea-pig NK1 receptor. Ultrasound calls in NK1R^{-/-} mouse pups were markedly reduced compared with those in WT pups, confirming the specific involvement of NK1 receptors in the regulation of vocalization. These observations suggest that centrally-acting NK1 receptor antagonists may have clin. utility in the treatment of a range of anxiety and mood disorders.

IT 170566-84-4, LY303870

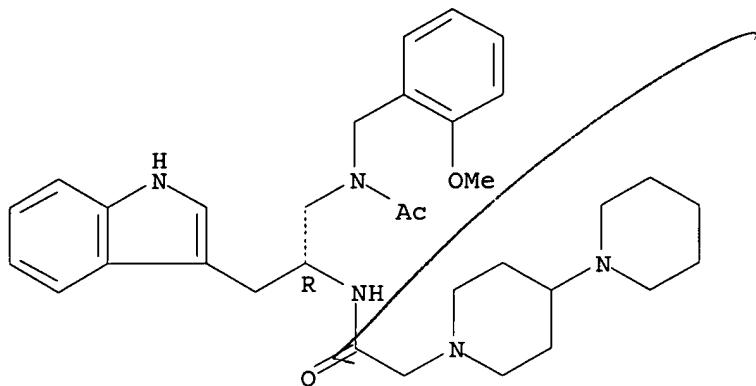
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(substance P (NK1) receptor **pharmacol.** blockade or genetic deletion attenuates neonatal stress-induced vocalization in guinea-pigs and mice in relation to NK1 antagonist role in treating anxiety and mood disorders)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, LY303870

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(substance P (NK1) receptor pharmacol. blockade or genetic deletion attenuates neonatal stress-induced vocalization in guinea-pigs and mice in relation to NK1 antagonist role in treating anxiety and mood disorders)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 20 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 133:59101 CA

TITLE: Preparation of vitronectin receptor antagonist pharmaceuticals

INVENTOR(S): Cheesman, Edward H.; Sworin, Michael; Rajopadhyem, Milind

PATENT ASSIGNEE(S): Du Pont Pharmaceuticals Co., USA

SOURCE: PCT Int. Appl., 228 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-----------------|-----------------|----------|
| WO 2000035887 | A2 | 20000622 | WO 1999-US30311 | 19991217 |
| WO 2000035887 | A3 | 20001116 | | |
| W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 6322770 | B1 | 20011127 | US 1999-281207 | 19990330 |
| US 2002015680 | A1 | 20020207 | US 1999-281209 | 19990330 |
| EP 1140864 | A2 | 20011010 | EP 1999-967441 | 19991217 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| PRIORITY APPLN. INFO.: | | US 1998-112831P | P | 19981218 |
| | | US 1998-80150P | P | 19980331 |
| | | US 1998-112715P | P | 19981218 |
| | | US 1998-112732P | P | 19981218 |

10/019,993

US 1998-112829P P 19981218
WO 1999-US30311 W 19991217

OTHER SOURCE(S) : MARPAT 133:59101

AB Compds. (Q)d-Ln-Ch (Q is a residue having a benzodiazepine-, benzodiazepinedione-, or dibenzotrihydroannulene-type moiety, d = 1-10, Ln is a linking group, Ch is a metal-bonding unit) were prep'd. for use in the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compds. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. Thus, (S,S,S)-4-[N-[3-[3,6-diaza-10-[N-(benzimidazol-2-ylmethyl)-N-methylcarbamoyl]-5-(carboxymethyl)-4-oxobicyclo[5.4.0]undeca-1(7),8,10-trien-3-yl]propyl]carbamoyl]-4-[[4-carboxy-2-[2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclodecyl]acetylamino]butanoyl]amino]butanoic acid was prep'd. (claimed compd.). Syntheses of radiopharmaceuticals, e.g., $^{99m}\text{Tc}(\text{VnA})$ (tricine) (phosphine), where VnA represents the vitronectin receptor antagonist, are also described.

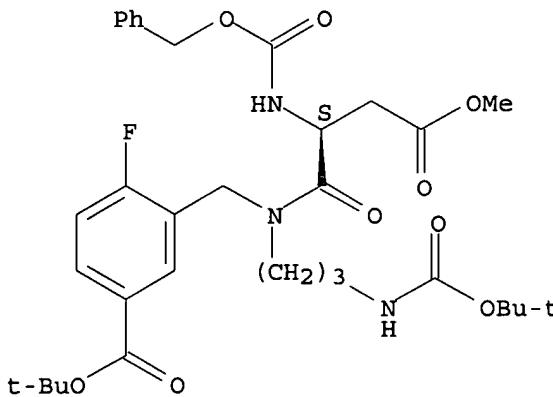
IT 277327-74-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of vitronectin receptor antagonist **pharmaceuticals**)

RN 277327-74-9 CA

CN 11-Oxa-2,5,9-triazatridecanoic acid, 5-[[5-[(1,1-dimethylethoxy)carbonyl]-2-fluorophenyl]methyl]-3-(2-methoxy-2-oxoethyl)-12,12-dimethyl-4,10-dioxo-, phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 277327-74-9P 277327-75-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of vitronectin receptor antagonist **pharmaceuticals**)

L15 ANSWER 21 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER:

TITLE:

(S) : SOURCE :

132:342631 CA

Lanepitant (El)

Ahluwalia, Amrita

Centre for Clinical Pharmacology, The Rayne Institute.

London, WC1E 6JJ, UK

Current Opinion in Central & Peripheral Nervous System Disorders

Current Opinion in Clinical and Diagnostic Research 2000, 2(2): 212-220
Investigational Drugs (2000), 2(2): 212-220

Investigational drugs (2000);
CODEN: COCDFA; ISSN: 1464-844X

COBEN: COBRA, 1
PharmaPress Ltd.

Pharmacist's Ed.
Journal: General Review

10/019,993

LANGUAGE: English

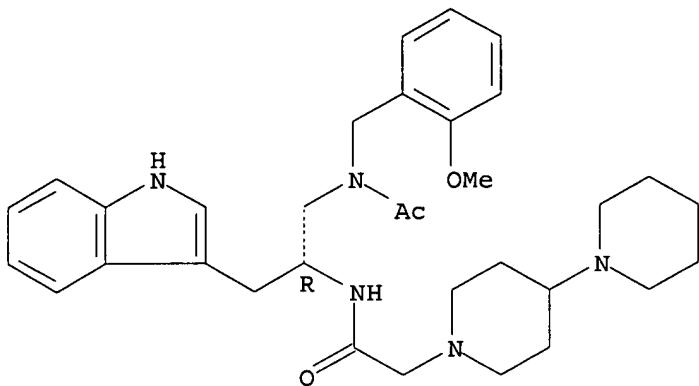
AB A review with 90 refs. Lanepitant (LY-303870) is a competitive NK1 (substance P) antagonist primarily under development by Eli Lilly as a potential treatment for migraine, for which it phase II trials have been reported. Following neg. results for phase II proof of concept trials for this indication, the current status of lanepitant is undisclosed [357864]. The compd. also has potential as a treatment for other diseases in which substance P (SP) has been implicated. These include pain, inflammation and asthma [187062]. Lilly reported results of clin. evaluations of lanepitant at the International Assocn. for the Study of Pain (Vienna, 1999). In comparison to placebo, lanepitant (200 mg) had no significant effect in preventing chronic migraine attacks over three months. Lanepitant also failed to show any significant redn. in pain scores in comparison to placebo when administered daily to patients with diabetic neuropathy. There was no detectable effect for lanepitant when administered in single doses or daily over three weeks to patients with osteoarthritis [351562]. Lilly presented results of a three-week, parallel, randomized, double-blind study in 214 outpatients with moderate to severe lower limb osteoarthritis at the 99th American Society for Clin. Pharmacol. and Therapeutics meeting (New Orleans, 1998). Patients were given 20, 60, 200 or 600 mg single-dose lanepitant, placebo or 375 mg naproxen, followed by 10, 30, 100 or 300 mg lanepitant, placebo or 375 mg naproxen bid. Pain intensity, pain relief, patient global impression scores and adjunctive analgesic use were compared across treatments. No statistically significant treatment differences were obsd. However, naproxen-treated patients had significantly less pain than placebo- and lanepitant-treated patients during the multiple-dose study. The study concluded that lanepitant was assocd. with diarrhea and was ineffective in relieving osteoarthritic pain [283772]. Results of a phase II study in 36 acute migraine patients were presented at the 8th Congress of the International Headache Society (June 1997, Amsterdam). This double-blind, placebo-controlled study involved 61 patients. There was no significant difference in response rate between different dosage groups (a response was defined as the conversion of a moderate-severe headache to a mild-moderate one in 2 h). The resp. response rates were 37, 22, 29 and 31% for the placebo, 30, 80 and 240 mg groups [258055]. Lanepitant was shown to be a fully functional NK1 antagonist in several in vitro assays and was orally active in a guinea pig model of inflammation. The compd. has an IC50 value of 0.15 nM [275923]. Lanepitant is claimed in WO-09514017, in which examples are presented, with affinity for the NK1 subtype in the sub-nanomolar range, and with a selectivity ratio over the NK2 subtype in the region of 1000-fold [277507].

IT 170566-84-4P, Lanepitant
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (antimigraine, analgesic, antiinflammatory and antiasthmatic testing of lanepitant)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4P, Lanepitant

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (antimigraine, analgesic, antiinflammatory and antiasthmatic testing of lanepitant)

L15 ANSWER 22 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 132:178588 CA

TITLE: Dual G1 and G2/M phase inhibition by SC-.alpha..alpha..delta.9, a combinatorially derived Cdc25 phosphatase inhibitor

AUTHOR(S): Tamura, Kenji; Rice, Robert L.; Wipf, Peter; Lazo, John S.

CORPORATE SOURCE: Department of Pharmacology, University of Pittsburgh, Pittsburgh, PA, 15261, USA

SOURCE: Oncogene (1999), 18(50), 6989-6996
CODEN: ONCNES; ISSN: 0950-9232

PUBLISHER: Stockton Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Cdc25 dual specificity phosphatase family has a central role in controlling cell cycle progression and has been implicated in the etiol. of cancer. One compd., 4-(benzyl-(2-[(2,5-diphenyl-oxazole-4-carbonyl)-amino]-ethyl)-carbamoyl)-2-decanoylamino butyric acid (SC-.alpha..alpha..delta.9), was previously identified as the most potent reported synthetic inhibitor of Cdc25 phosphatases in vitro. In the present study, the authors demonstrate that SC-.alpha..alpha..delta.9 inhibited Cdc25-dependent cell cycle progression at both G1 and G2/M phase using tsFT210 cells, which express a temp.-sensitive Cdc2 mutant. SC-.alpha..alpha..delta.9 blocked both G2/M transition and dephosphorylation of Cdc2 in a concn.-dependent manner.

SC-.alpha..alpha..delta.9 also enhanced tyrosine phosphorylation of both Cdk2 and Cdk4, and decreased Cdk4 kinase activity. Both of the kinases are potent regulators of G1 transition. Furthermore, closely related chem. analogs that lacked Cdc25 inhibitory activity failed to block cell cycle progression at both G1 and G2/M, and did not affect Cdc2 phosphorylation or Cdk4 kinase activity. SC-.alpha..alpha..delta.9 did not alter p53, p21 or p16 levels. The results support the hypothesis that the disruption in cell cycle transition caused by SC-.alpha..alpha..delta.9 was due to intracellular Cdc25 inhibition. The authors propose that the SC-.alpha..alpha..delta.9 **pharmacophore**

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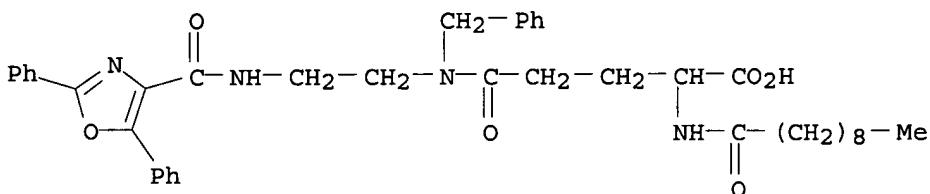
could be useful in further clarifying the role of Cdc25 phosphatase-dependent pathways in checkpoint control, oncogenesis, and apoptosis and may contribute to a further development of novel anticancer agents.

IT 219905-91-6, SC-.alpha..alpha..delta.9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(dual G1 and G2/M phase inhibition by combinatorially derived Cdc25 phosphatase inhibitor SC-.alpha..alpha..delta.9 in relation to effect on Cdc2 and Cdk2 and Cdk4 phosphorylation and Cdk4 kinase)

RN 219905-91-6 CA

CN Glutamine, N-[2-[(2,5-diphenyl-4-oxazolyl)carbonyl]amino]ethyl]-N2-(1-oxodecyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 219905-91-6, SC-.alpha..alpha..delta.9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(dual G1 and G2/M phase inhibition by combinatorially derived Cdc25 phosphatase inhibitor SC-.alpha..alpha..delta.9 in relation to effect on Cdc2 and Cdk2 and Cdk4 phosphorylation and Cdk4 kinase)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 23 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 132:146140 CA

TITLE: Three and four dimensional-quantitative structure activity relationship (3D/4D-QSAR) analyses of CYP2D6 inhibitors

AUTHOR(S): Ekins, Sean; Bravi, Gianpaolo; Binkley, Shelly; Gillespie, Jennifer S.; Ring, Barbara J.; Wikle, James H.; Wrighton, Steven A.

CORPORATE SOURCE: Departments of Drug Disposition, Lilly Research Laboratories, Eli Lilly and Co., Lilly Corporate Center, Indianapolis, IN, 46285, USA

SOURCE: Pharmacogenetics (1999), 9(4), 477-489
CODEN: PHMCEE; ISSN: 0960-314X

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Three- and four-dimensional quant. structure activity relationship (3D/4D-QSAR) pharmacophore models of competitive inhibitors of CYP2D6 were constructed using data from our lab. or the literature. The 3D-QSAR pharmacophore models of the common structural features of CYP2D6 inhibitors were built using the program Catalyst (Mol. Simulations, San Diego, CA, USA). These 3D-QSAR models were compared with 3D and 4D-QSAR partial least squares (PLS) models which were constructed using mol. surface-weighted holistic invariant mol. (MS-WHIM) descriptors of size and shape of inhibitors. The first Catalyst model was generated from multiple conformers of competitive inhibitors (n = 20) of CYP2D6 mediated bufurolool 1'-hydroxylation. This model demonstrated a correlation of obsd. and predicted Ki (apparent) values of r = 0.75. A

10/019, 993

second Catalyst model was constructed from literature derived K_i (apparent) values ($n = 31$) for the inhibition of CYP2D6. This model provided a correlation of obsd. and predicted inhibition for CYP2D6 of $r = 0.91$. Both Catalyst K_i pharmacophores were then validated by predicting the K_i (apparent) of a test set of known CYP2D6 inhibitors ($n = 15$). Ten out of 15 of these K_i (apparent) values were predicted to be within one log residual of the obsd. value using our CYP2D6 inhibitor model, while the literature model predicted nine out of 15 values. Similarly, 3D- and 4D-QSARs derived from PLS MS-WHIM for our dataset yielded predictable models as assessed using cross-validation. The corresponding cross-validated PLS MS-WHIM model for the literature dataset yielded a comparable 3D-QSAR and improved 4D-QSAR value. Such computational models will aid in future prediction of drug-drug interactions.

IT 170566-84-4, Ly303870

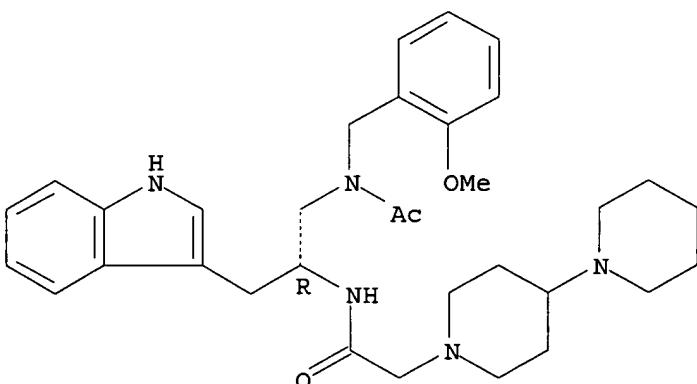
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(3D/4D-QSAR analyses of CYP2D6 inhibitors)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, Ly303870

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(3D/4D-QSAR analyses of CYP2D6 inhibitors)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 24 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 131:310284 CA

TITLE: Preparation of substituted diamines as $\alpha.4.\beta.1$ mediated cell adhesion inhibitors

INVENTOR(S): McCarthy, Clive; Harris, Neil Victor; Morley, Andrew David

PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Limited, UK

SOURCE: PCT Int. Appl., 189 pp.

CODEN: PIXXD2

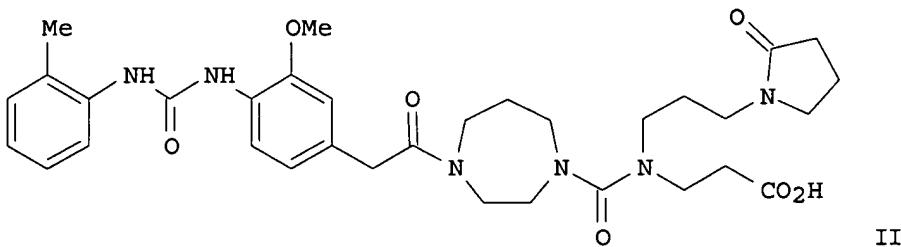
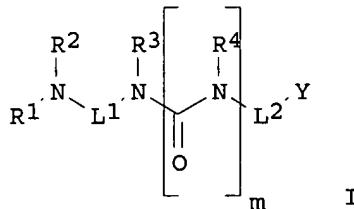
DOCUMENT TYPE: Patent

10/019, 993

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|------------|
| WO 9954321 | A1 | 19991028 | WO 1999-GB1230 | 19990421 |
| W: AE, AL, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 9937164 | A1 | 19991108 | AU 1999-37164 | 19990421 |
| PRIORITY APPLN. INFO.: | | | GB 1998-8431 | A 19980421 |
| | | | GB 1998-11417 | A 19980528 |
| | | | US 1998-104139P | P 19981014 |
| | | | US 1998-104238P | P 19981014 |
| | | | WO 1999-GB1230 | W 19990421 |

OTHER SOURCE(S): MARPAT 131:310284
GI



AB Substituted diamines (I) [wherein R1 = lower alkyl or various combinations of substituents, such as (cyclo)alkyl, (cyclo)alkenyl, (cyclo)alkynyl, (hetero)aryl(alkyl), etc., and linkage groups, such as C(O), C(S), (un)substituted NHC(O) or NHC(S), S(O), SO2, heteroaryldiyl, heterocycloalkylene, phenylene, etc.; R2 = H or lower alkyl; R3 and R4 = independently H or (un)substituted alkyl, alkenyl, or alkynyl; or R3 and R4 together may = (CH2)n or C(O)CH:CH; L1 = alkylene or (un)substituted (CHR10)pAr(CHR10)p; or L1N(R3) = (un)substituted alkylheterocyclo; or N(R2)L1 = (un)substituted heterocycloalkyl; or N(R2)L1N(R3) = diaza heterocyclo; L2 = (un)substituted alkylene, alkenylene, alkynylene, cycloalkenylene, cycloalkylene, or heterocycloalkylene; Y = carboxy (or an acid bioisostere) or (un)substituted C(O)NH2; Ar = phenylene, (hetero)cycloalkylene, or heteroaryldiyl; R10 = H or lower alkyl; m = 0 or

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1; n = 2-4; p = 0-3] were prep'd by solid phase synthesis as .alpha.4.beta.1 mediated cell adhesion inhibitors. For example, the ureido deriv. (II) was prep'd. using a Wang resin support. The resin was loaded with acryloyl chloride and treated sequentially with 1-(3-aminopropyl)-2-pyrrolidinone, triphosgene, homopiperazine, and 3-methoxy-4-[3-(2-methylphenyl)ureidophenyl]acetic acid to yield II. Compds. of formula I regulate the interaction of VCAM-1 and fibronectin with the integrin VLA-4 (.alpha.4.beta.1). Particular compds. of the invention suppressed cell adhesion to fibronectin and VCAM-1 with IC₅₀ values ranging from 100. μ M to 1 nM in assays on metabolically labeled RAMOS cells. Particular compds. also inhibited airway inflammation after antigen challenge in mice and rats. The inhibitors caused a statistically significant redn. in eosinophil and lymphocyte nos. in bronchoalveolar lavage (BAL) and airway tissue. The invention compds., their prodrugs, pharmaceutically acceptable salts, and solvates, are useful for the treatment of inflammatory diseases and asthma.

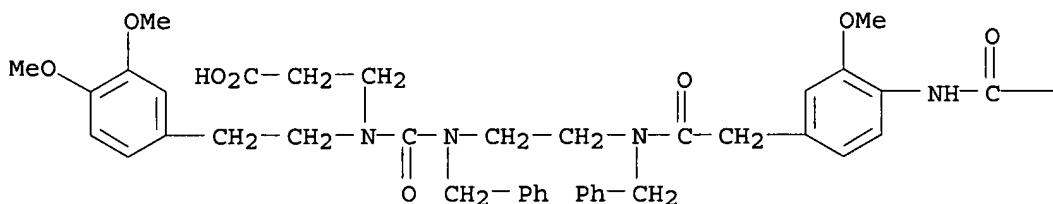
IT 247252-96-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prep'n. of substituted diamines as .alpha.4.beta.1 mediated cell adhesion inhibitors for treatment of inflammatory diseases and asthma)

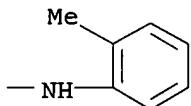
RN 247252-96-6 CA

CN .beta.-Alanine, N-[2-(3,4-dimethoxyphenyl)ethyl]-N-[[2-[[[3-methoxy-4-[[[2-methylphenyl]amino]carbonyl]amino]phenyl]acetyl](phenylmethyl)amino]ethyl](phenylmethyl)amino]carbonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IT 247252-96-6P 247252-97-7P 247252-98-8P
247252-99-9P 247253-00-5P 247253-01-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compd.; prep'n. of substituted diamines as .alpha.4.beta.1 mediated cell adhesion inhibitors for treatment of inflammatory diseases and asthma)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

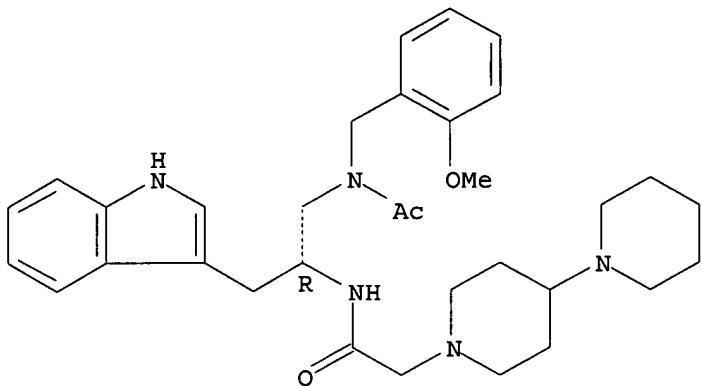
10/019,993

ACCESSION NUMBER: 131:208582 CA
TITLE: Three- and four-dimensional quantitative structure activity relationship analyses of cytochrome P-450 3A4 inhibitors
AUTHOR(S): Ekins, Sean; Bravi, Gianpaolo; Binkley, Shelly; Gillespie, Jennifer S.; Ring, Barbara J.; Wikel, James H.; Wrighton, Steven A.
CORPORATE SOURCE: Department of Drug Disposition, Lilly Research Laboratories, Lilly Corporate Center, Eli Lilly and Co., Indianapolis, IN, USA
SOURCE: Journal of Pharmacology and Experimental Therapeutics (1999), 290(1), 429-438
CODEN: JPETAB; ISSN: 0022-3565
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The program Catalyst was used to build three-dimensional quant. structure activity relationship (3D-QSAR) **pharmacophore** models of the structural features common to competitive-type inhibitors of cytochrome P 450 (CYP) 3A4. These were compared with 3D- and four-dimensional (4D)-QSAR partial least-squares (PLS) models built using mol. surface-weighted holistic invariant mol. (MS-WHIM) descriptors for size and shape of the inhibitor. The Catalyst **pharmacophore** model generated from multiple conformers of competitive inhibitors of CYP3A4-mediated midazolam 1'-hydroxylation (n = 14) yielded a high correlation of obsd. and predicted Ki values of $r = 0.91$. Similarly, PLS MS-WHIM was used to produce 3D- and 4D-QSARs for this data set and produced models that were statistically predictable after cross-validation. Two addnl. Catalyst **pharmacophores** were constructed from literature Ki values (n = 32) derived from the inhibition of CYP3A-mediated cyclosporin A metab. and IC50 data (n = 22) from the inhibition of CYP3A4-mediated quinine 3-hydroxylation. These Catalyst **pharmacophores** illustrated correlations of obsd. and predicted inhibition for CYP3A4 of $r = 0.77$ and 0.92 , resp. The corresponding 4D-QSARs generated by PLS MS-WHIM for these data sets were of comparable quality as judged by cross-validation. Both Ki **pharmacophores** generated with Catalyst were also validated by predicting the Ki(apparent) values of a test set of eight CYP3A4 inhibitors not included in either model. In seven of eight cases, the residuals of the predicted Ki(apparent) values were within 1 log unit of the obsd. values. The 3D- and 4D-QSAR models produced in this study suggest the utility of future in silico prediction of CYP3A4-mediated **drug-drug** interactions.

IT 170566-84-4, LY303870
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(3D- and 4D-QSAR analyses of cytochrome P 450 3A4 inhibitors)
RN 170566-84-4 CA
CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, LY303870

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(3D- and 4D-QSAR analyses of cytochrome P 450 3A4 inhibitors)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 26 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 131:181722 CA

TITLE: 99m-technetium-labelled peptide-HYNIC conjugates:
Effects of lipophilicity and stability on
biodistribution

AUTHOR(S): Decristoforo, Clemens; Mather, Stephen J.

CORPORATE SOURCE: Nuclear Medicine Research Laboratory, St.
Bartholomew's Hospital, London, UKSOURCE: Nuclear Medicine and Biology (1999), 26(4), 389-396
CODEN: NMBIEO; ISSN: 0969-8051

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The aim of this study was to explore the effects of lipophilicity and stability on the biodistribution of 99mTc labeled peptides through the use of different co-ligands. 6-Hydrazinopyridine-3-carboxylic acid (HYNIC) was coupled to the somatostatin analog RC160 and radiolabeled using a range of ethylenediaminediacetic acid (EDDA) and EDTA derivs. as well as tricine and pyridine/tricine as co-ligands. After labeling with technetium-99m, chromatog., stability, protein-binding, and rat biodistribution studies were performed. For most co-ligands, biodistribution correlated well with in vitro properties. Lipophilic substitution on EDDA resulted in higher protein binding, increased liver uptake, and intestinal excretion. Stabilization of tricine with pyridines reduced blood levels and lowered liver uptake. EDTA derivs. showed high instability in vitro and in vivo.

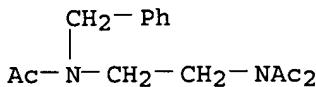
IT 103974-84-1DP, 99mTc-labeled mixed complexes

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(effects of lipophilicity and stability on biodistribution of
99mTc-labeled peptide-HYNIC conjugates)

RN 103974-84-1 CA

CN Acetamide, N-acetyl-N-[2-[acetyl(phenylmethyl)amino]ethyl]- (9CI) (CA
INDEX NAME)

10/019, 993



IT 103974-84-1DP, 99mTc-labeled mixed complexes

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (effects of lipophilicity and stability on biodistribution of 99mTc-labeled peptide-HYNIC conjugates)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 27 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 130:346558 CA

TITLE: Systematic screening approach for chiral separations of basic compounds by capillary electrophoresis with modified cyclodextrins

AUTHOR(S): Liu, Li; Nussbaum, Mark A.

CORPORATE SOURCE: Pharmaceutical Sciences Division, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN, 46285, USA

SOURCE: Journal of Pharmaceutical and Biomedical Analysis (1999), 19(5), 679-694

CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A simple, systematic method was developed for rapidly screening potential capillary electrophoresis (CE) sepn. conditions for small, amine-contg. enantiomers. During method development, 39 pairs of enantiomers were studied and partial or complete sepn. was achieved in every case.

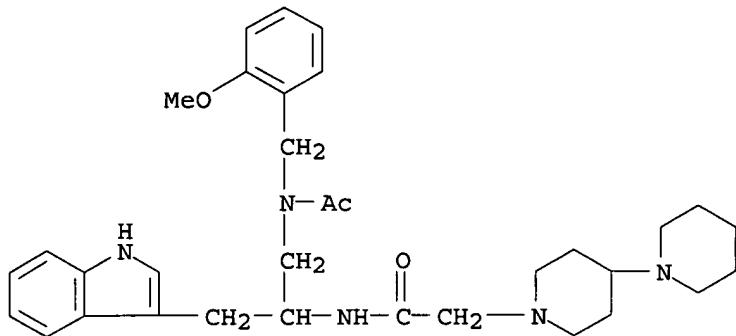
Baseline resoln. was achieved by these initial screening conditions in over half of the cases. The screening strategy uses a bare fused silica capillary and a pH 2.5 amine-modified phosphate buffer contg. one of the selected cyclodextrins (CD): dimethyl-.beta.-CD, hydroxypropyl-.beta.-CD, hydroxypropyl-.alpha.-CD, hydroxypropyl-.gamma.-CD and sulfated-.beta.-CD. An addnl. set of compds. were screened by this approach to demonstrate the validity of the method. The paper outlines the exptl. work carried out to develop the screen and describes how one might implement it for a new compd.

IT 170566-83-3

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process) (systematic screening approach for chiral sepn. of amines by capillary electrophoresis using modified cyclodextrins)

RN 170566-83-3 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)



IT 170566-83-3 170566-84-4 170566-85-5

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)

(systematic screening approach for chiral sepn. of amines by capillary electrophoresis using modified cyclodextrins)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 28 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 130:182467 CA

TITLE: Preparation of 2-(acylamino)propanamines as tachykinin receptor antagonists

INVENTOR(S): Fritz, James Erwin; Hipskind, Philip Arthur; Kaldor, Stephen Warren; Lobb, Karen Lynn; Nixon, James Arthur

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

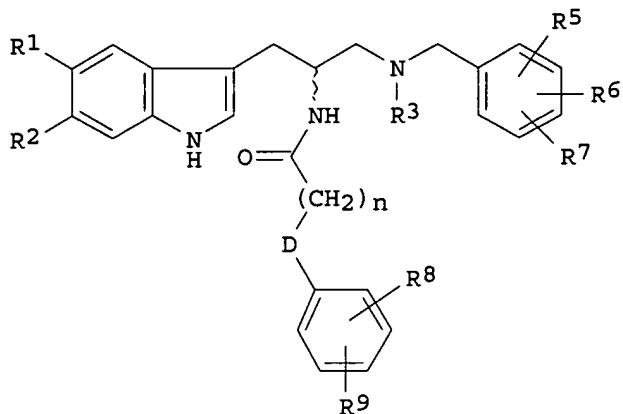
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 9907677 | A1 | 19990218 | WO 1998-US16333 | 19980806 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9886933 | A1 | 19990301 | AU 1998-86933 | 19980806 |
| EP 1005454 | A1 | 20000607 | EP 1998-938403 | 19980806 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| BR 9811821 | A | 20000815 | BR 1998-11821 | 19980806 |
| JP 2001512715 | T2 | 20010828 | JP 2000-506181 | 19980806 |
| US 6358994 | B1 | 20020319 | US 2000-463855 | 20000127 |
| NO 2000000519 | A | 20000331 | NO 2000-519 | 20000201 |
| PRIORITY APPLN. INFO.: | | | US 1997-54997P | P 19970806 |
| | | | WO 1998-US16333 | W 19980806 |
| OTHER SOURCE(S): | | MARPAT 130:182467 | | |
| GI | | | | |



AB Nonpeptidyl 2-(acylamino)propanamines [I; R1, R2 = H, HO, halo, C1-6 alkyl, C1-6 alkoxy; R3 = H, C2-7 alkanoyl, (dimethyl)glycyl; R5-R7 = H, HO, halo, C1-6 alkyl, C1-6 alkoxy, CF3; R8, R9 = H, HO, C1-6 alkyl(thio), C1-6 alkoxy, C1-6 alkylamino, CF3O, CHO, cyano, pyrrolyl, imidazolyl, etc.; D = S(O)m, NH, CO, O; m = 0-2; n = 1-6], e.g., I [R1 = R2 = R6 = R7 = R8 = H, R3 = Ac, R5 = 2-MeO, R9 = 4-(1,2,3-thiadiazol-4-yl), D = O, n = 1], tachykinin receptor antagonists (no data) useful in the treatment of various conditions including Alzheimer's disease, were prep'd., e.g., by amidation of (R)-2-amino-3-(1H-indol-3-yl)-1-[N-(2-methoxybenzyl)acetylamino]propane.cndot.2HCl (4-step prepn. from L-tryptophan given). I, their **pharmaceutically acceptable salts** or **solvates** and **pharmaceutical compns.** contg. I were claimed.

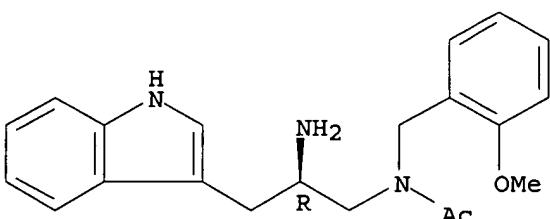
IT 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and amidation; prepn. of 2-(acylamino)propanamines as tachykinin receptor antagonists)

RN 175460-99-8 CA

CN Acetamide, N-[(2R)-2-amino-3-(1H-indol-3-yl)propyl]-N-[(2-methoxyphenyl)methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HCl

IT 175460-99-8P

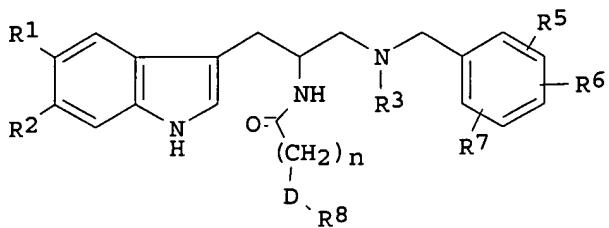
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and amidation; prepn. of 2-(acylamino)propanamines as

10/019,993

tachykinin receptor antagonists)
IT 175460-97-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection; prepn. of 2-(acylamino)propanamines as tachykinin receptor antagonists)
IT 170566-88-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and etherification; prepn. of 2-(acylamino)propanamines as tachykinin receptor antagonists)
IT 170567-28-9P 220652-75-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-(acylamino)propanamines as tachykinin receptor antagonists)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 29 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 130:168238 CA
TITLE: 2-acylaminopropanamines as tachykinin receptor antagonists
INVENTOR(S): Fritz, James Erwin; Hipskind, Philip Arthur; Kaldor, Stephen Warren; Lobb, Karen Lynn; Nixon, James Arthur
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 9907681 | A1 | 19990218 | WO 1998-US16313 | 19980806 |
| W: AL, AM, AT, AU, AZ, BB, GB, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9886926 | A1 | 19990301 | AU 1998-86926 | 19980806 |
| EP 1003723 | A1 | 20000531 | EP 1998-938395 | 19980806 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| BR 9811819 | A | 20000815 | BR 1998-11819 | 19980806 |
| JP 2001512717 | T2 | 20010828 | JP 2000-506185 | 19980806 |
| US 6339094 | B1 | 20020115 | US 2000-463640 | 20000127 |
| NO 2000000518 | A | 20000331 | NO 2000-518 | 20000201 |
| PRIORITY APPLN. INFO.: | | | US 1997-55105P | P 19970806 |
| | | | WO 1998-US16313 | W 19980806 |
| OTHER SOURCE(S): | | MARPAT 130:168238 | | |
| GI | | | | |



AB Title compds. [I; R1 and R2 are independently hydrogen, halo, alkyl, hydroxy, alkoxy; R3 is hydrogen, acetyl, alkanoyl, glycyl, dimethylglycyl; R5, R6, R7 are independently hydrogen, halo, alkyl alkoxy, trifluoromethyl hydroxy; n is 1-6; D is S(O)_m, NH, O; m is 0, 1, 2; R8 is a monocyclic or bicyclic carbocyclic or heterocyclic group, optionally substituted with one or more moieties from the group consisting of oxo, alkyl, alkoxy, hydroxy, halo, and trifluoromethyl], or a pharmaceutically acceptable salt or solvate are prepd. in the presence of isocyanate resin polymer-bound coupling reagent 1-(3-dimethylaminopropyl)-3-propylcarbodiimide hydrochloride as tachykinin receptor antagonists and methods of treatment, pharmaceutical formulations are provided. Thus, (R)-I (R1 = H; R2 = H; R5 = 2-OMe; R6 = H; R7 = H; R8 = Br; D = electron pair; n = 1; R3 = Ac) were prepd.

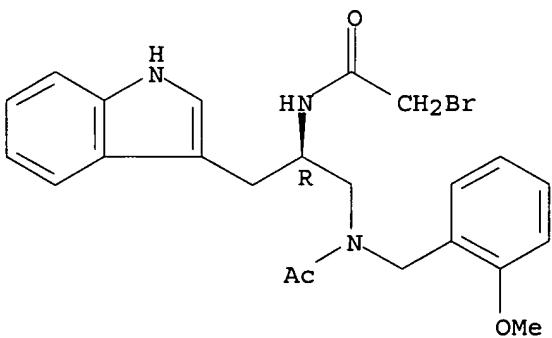
IT 170566-88-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep. of acylaminopropanamines as tachykinin receptor antagonists)

RN 170566-88-8 CA

CN Acetamide, N-[(2R)-2-[(bromoacetyl)amino]-3-(1H-indol-3-yl)propyl]-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-88-8P 220441-63-4P 220441-64-5P
 220441-65-6P 220441-66-7P 220441-67-8P
 220441-68-9P 220441-69-0P 220441-70-3P
 220441-71-4P 220441-72-5P 220441-73-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prep. of acylaminopropanamines as tachykinin receptor antagonists)

IT 175460-97-6P 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

10/019, 993

(Reactant or reagent)

(prepn. of acylaminopropanamines as tachykinin receptor antagonists)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 30 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 130:153920 CA

TITLE: Preparation of C-4" substituted macrolide erythromycin analogs as antibacterial and antiprotozoal agents

INVENTOR(S): Brighty, Katherine Elizabeth; Kaneko, Takushi; Linde, Robert Gerald, II; Masamune, Hiroko; McGuirk, Paul Robert; Su, Wei-guo; Wu, Yong-jin; Yang, Bingwei Vera

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: Eur. Pat. Appl., 59 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

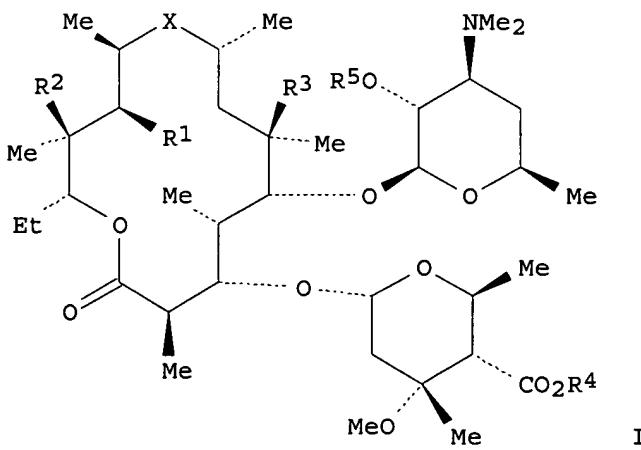
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| EP 895999 | A1 | 19990210 | EP 1998-305956 | 19980727 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| US 6025350 | A | 20000215 | US 1998-124408 | 19980729 |
| CA 2244519 | AA | 19990206 | CA 1998-2244519 | 19980805 |
| JP 11116593 | A2 | 19990427 | JP 1998-232395 | 19980805 |
| BR 9802851 | A | 20000829 | BR 1998-2851 | 19980805 |
| US 6300316 | B1 | 20011009 | US 1999-378886 | 19990823 |
| PRIORITY APPLN. INFO.: | | | US 1997-54866P | P 19970806 |
| | | | US 1998-124408 | A3 19980729 |

OTHER SOURCE(S): MARPAT 130:153920

GI



AB Macrolides I (X = CO, chain contg. substituted carbon and nitrogen; R¹, R² = independently OH; R¹R² = heterocycle; R³ = OH, OMe; R⁴ = aminoalkyl; R⁵ = H, acyl) were prep'd. as antibacterial and antiprotozoal agents. The invention also relates to pharmaceutical compns. contg. the compds. of formula I and to methods of treating bacterial and protozoal

10/019, 993

infections by administering the compds. of formula I. Thus, 4"-O-[2-(N,N-bis-2,4-dimethoxybenzyl)aminoethyl]aminocarbonylerythromycylamine was prep'd. and tested for its antibacterial and antiprotozoal activities.

IT 220215-86-1P

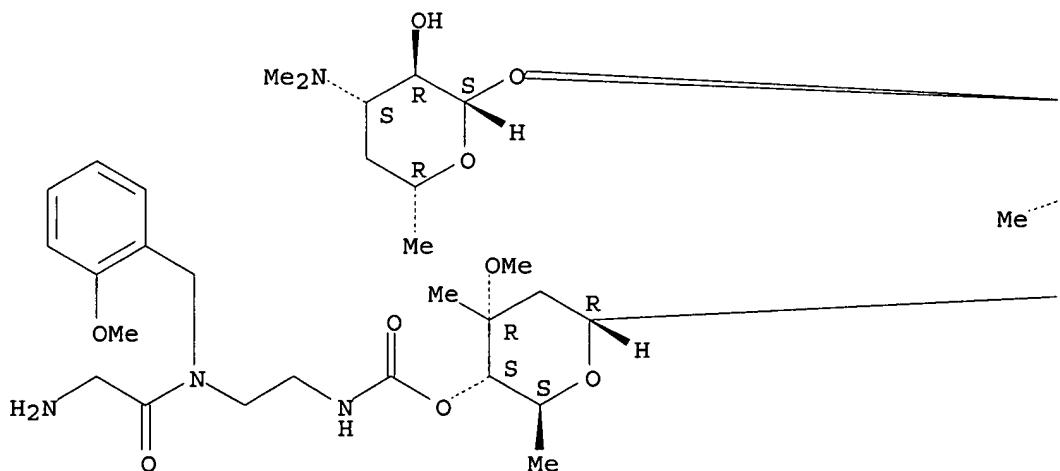
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of C-4'' substituted macrolide erythromycin analogs as antibacterial and antiprotozoal agents)

RN 220215-86-1 CA

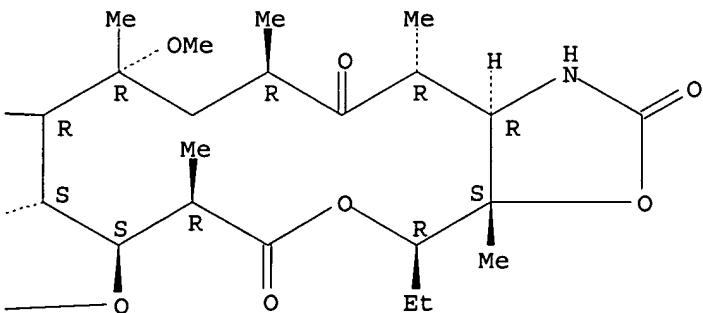
CN 2H-Oxacyclotetradecino[4,3-d]oxazole-2,6,14(1H,7H)-trione, 8-[[4-O-[[[2-[(aminoacetyl)[(2-methoxyphenyl)methyl]amino]ethyl]amino]carbonyl]-2,6-dideoxy-3-C-methyl-3-O-methyl-.alpha.-L-ribo-hexopyranosyl]oxy]-4-ethyldecahydro-11-methoxy-3a,7,9,11,13,15-hexamethyl-10-[[3,4,6-trideoxy-3-(dimethylamino)-.beta.-D-xylo-hexopyranosyl]oxy]-, (3aS,4R,7R,8S,9S,10R,11R,13R,15R,15aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 220215-86-1P

10/019,993

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prep. of C-4'' substituted macrolide erythromycin analogs as antibacterial and antiprotozoal agents)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 31 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 130:119061 CA

TITLE: Disruption of insulin-like growth factor-1 signaling and down-regulation of Cdc2 by SC-.alpha..alpha..delta.9, a novel small molecule antisignaling agent identified in a targeted array library

AUTHOR(S): Vogt, Andreas; Rice, Robert L.; Settineri, Catherine E.; Yokokawa, Fumiaki; Yokokawa, Shiho; Wipf, Peter; Lazo, John S.

CORPORATE SOURCE: Department of Pharmacology, School of Medicine, University of Pittsburgh, Pittsburgh, PA, USA

SOURCE: Journal of Pharmacology and Experimental Therapeutics (1998), 287(2), 806-813

CODEN: JPETAB; ISSN: 0022-3565

PUBLISHER: Lippencott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We previously reported the generation of a library of hydrophobic oxazole-based small mols. designed as inhibitors of phosphatases involved in cellular signaling and cell cycle control. One member of the targeted array library, 4-(benzyl-(2-[(2,5-diphenyl-oxazole-4-carbonyl)amino]ethyl)carbamoyl)-2-decanoylaminobutyric acid (SC-.alpha..alpha..delta.9), inhibited cell growth in the G0/G1 phase of the cell cycle. To investigate potential mechanisms for SC-.alpha..alpha..delta.9 antiproliferative activity, we have used mouse embryonic fibroblasts transformed with simian virus 40 large T antigen mouse embryonic fibroblasts as a model system for a malignant phenotype that depends on overexpression of cell cycle regulators and autocrine stimulation by insulin-like growth factor-1. Structure-activity relation studies with SC-.alpha..alpha..delta.9 and four library congeners demonstrated that antiproliferative activity was not a result of overall hydrophobicity. Rather, SC-.alpha..alpha..delta.9 decreased insulin-like growth factor-1 receptor tyrosine phosphorylation, receptor expression, mitogen-activated protein kinase activation and levels of the cyclin-dependent kinase Cdc2. Less toxic congeners only partially affected receptor expression, receptor tyrosine phosphorylation and Cdc2 levels. Thus SC-.alpha..alpha..delta.9, which is structurally distinct from other known small mols. that decrease intracellular Cdc2 levels, has profound effects on intracellular signaling. Furthermore, SC-.alpha..alpha..delta.9, but not vanadate or okadaic acid, selectively inhibited the growth of simian virus 40 large T antigen mouse embryonic fibroblasts compared to the parental cells. These results suggest that overexpression of Cdc2 and increased dependence on insulin-like growth factor-1 autocrine stimulation are responsible for the increased sensitivity of simian virus 40 large T antigen mouse embryonic fibroblasts to SC-.alpha..alpha..delta.9. The SC-.alpha..alpha..delta.9 pharmacophore could be a useful platform for the development of novel antisignaling agents.

IT 219857-86-0, SC-.alpha..alpha..delta.4II

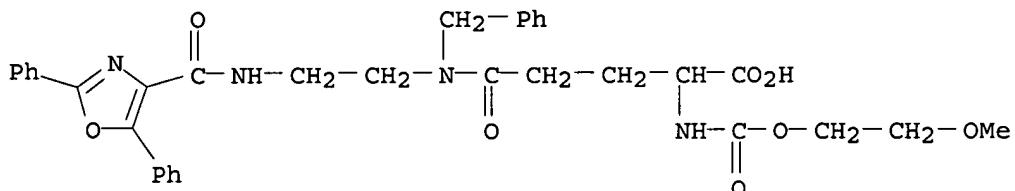
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

10/019,993

(disruption of insulin-like growth factor-1 signaling and down-regulation of Cdc2 by SC-.alpha..alpha..delta.9, a novel small mol. antisignaling agent identified in a targeted array library)

RN 219857-86-0 CA

CN Glutamine, N-[2-[[[(2,5-diphenyl-4-oxazolyl)carbonyl]amino]ethyl]-N2-[(2-methoxyethoxy)carbonyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 219857-86-0, SC-.alpha..alpha..delta.4II 219905-91-6,
SC-.alpha..alpha..delta.9 219905-92-7, SC-

.alpha..alpha..delta.6III
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(disruption of insulin-like growth factor-1 signaling and down-regulation of Cdc2 by SC-.alpha..alpha..delta.9, a novel small mol. antisignaling agent identified in a targeted array library)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 32 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 130:95560 CA

TITLE: Preparation of barbituric acid derivatives with antimetastatic and antitumor activity

INVENTOR(S): Oliva, Ambrogio; De Cillis, Gianpiero; Grams, Frank; Livi, Valeria; Zimmermann, Gerd; Menta, Ernesto; Krell, Hans-Willi

PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Germany

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIIXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

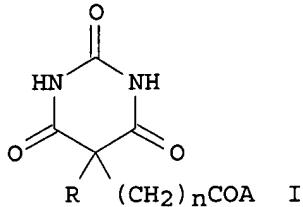
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9858925 | A1 | 19981230 | WO 1998-EP3677 | 19980618 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9885391 | A1 | 19990104 | AU 1998-85391 | 19980618 |
| AU 746853 | B2 | 20020502 | | |
| EP 989982 | A1 | 20000405 | EP 1998-936361 | 19980618 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 9810450 | A | 20000905 | BR 1998-10450 | 19980618 |
| JP 2002504916 | T2 | 20020212 | JP 1999-503748 | 19980618 |

10/019,993

ZA 9805352 A 19991220 ZA 1998-5352 19980619
US 6335332 B1 20020101 US 2000-445461 20000403
PRIORITY APPLN. INFO.: EP 1997-110200 A 19970621
WO 1998-EP3677 W 19980618

OTHER SOURCE(S): MARPAT 130:95560

GI

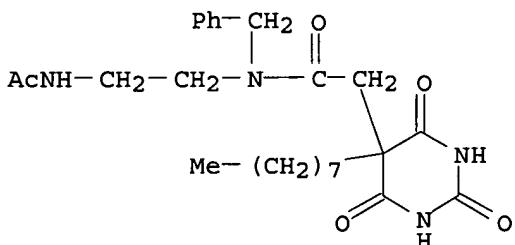


AB The title compds. [I; R = WV; A = R1, NR2(CH2)mNR9TR10, etc.; R1 = OH, C1-4 alkoxy, NH2, mono- or di(C1-4 alkyl)amino, (un)substituted phenoxy, benzyloxy, etc.; R9, R10 = H, (un)substituted C1-4 alkyl, Ph, etc.; R9R10NCO may form a 5- or 6-membered lactam ring; T = CO, SO2; V = (un)substituted (un)satd. mono- or bicyclic group optionally contg. 1-3 N, O, S; W = bond, C1-8 alkyl, C2-8 alkenyl; n = 1-3] as enantiomers, racemates, diastereoisomers, tautomers or their mixts., and their pharmaceutically acceptable salts, inhibitors of the metzincins useful for the title purpose, were prep'd. For example, cyclocondensation of urea with di-Et 2-octylmalonate (prepn. by alkylation of di-Et malonate with 1-bromoocetane given) gave 5-octylbarbituric acid which was alkylated with BrCH₂CO₂Et in DMF in the presence of Na₂CO₃ to give 5-octyl-5-(ethoxycarbonylmethyl)barbituric acid. The latter in vitro inhibited human neutrophil collagenase (MMP-8) with IC₅₀ 107 nM and gelatinase 92 kD (MMP-9) with IC₅₀ 19.6 nM which gave selectivity (MMP-9/MMP-8) ratio of 0.18-0.2, vs. 0.93 for batimastat as a ref. Approx. 6 I were prep'd. and approx. 21 I were claimed.

IT 219310-92-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of barbituric acid derivs. with antimetastatic and antitumor activity)

RN 219310-92-6 CA

CN 5-Pyrimidineacetamide, N-[2-(acetylaminio)ethyl]hexahydro-5-octyl-2,4,6-trioxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 219310-92-6P 219310-93-7P 219310-96-0P

10/019, 993

219310-97-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of barbituric acid derivs. with antimetastatic and antitumor activity)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 33 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 130:33026 CA

TITLE: Tachykinin receptor antagonists for treatment of pulmonary hypertension

INVENTOR(S): Gehlert, Donald Richard; Steinberg, Mitchell Irvin

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: U.S., 12 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

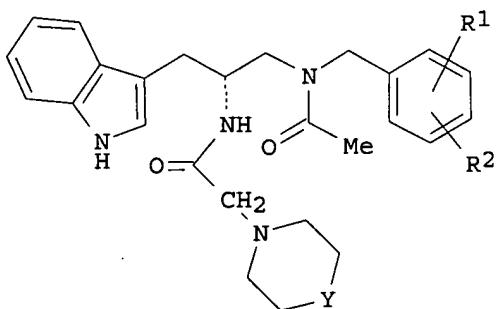
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 5846973 | A | 19981208 | US 1997-862709 | 19970523 |
| PRIORITY APPLN. INFO.: | | | US 1997-862709 | 19970523 |

GI



I

AB This invention provides methods of inhibiting pulmonary hypertensive disease which comprise administering to a mammal in need thereof a compd. having activity as a tachykinin receptor antagonist. A most preferred class of tachykinin receptor antagonists are compds. of the structure (I; R1, R2 = H, Me, OMe, Cl, CF3; Y = CHR3, NR3; R3 = cyclohexyl, piperidyl, Ph). I (R1 = 2-OMe, R2 = H, Y = CHR3; R3 = piperidyl) was prep'd. and tested for binding to NK1 and NK2 receptors. Various formulations of tachykinin receptor antagonists, such as capsules, tablets, dry powder inhaler, suppositories, etc., were proposed.

IT 167678-33-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tachykinin receptor antagonists for treatment of pulmonary hypertension)

RN 167678-33-3 CA

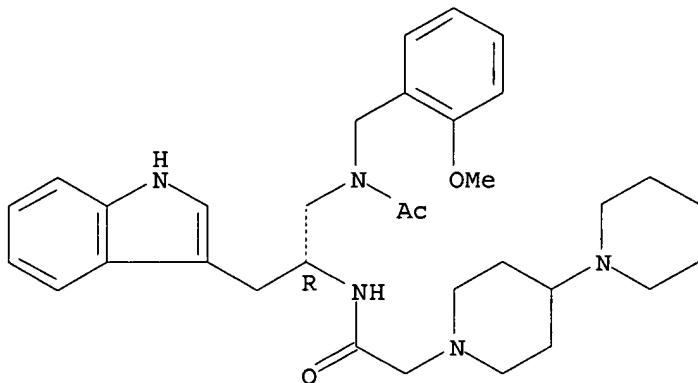
CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-

10/019,993

methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-, dihydrochloride, trihydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



●2 HCl

PAGE 2-A

●3 H₂O

IT 167678-33-3P 170566-84-4P 170567-08-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tachykinin receptor antagonists for treatment of pulmonary hypertension)

IT 175460-97-6P 175460-98-7P 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tachykinin receptor antagonists for treatment of pulmonary hypertension)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 34 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 129:286003 CA

TITLE: Methods using tachykinin receptor antagonists for treating bone loss, conditions associated with a lack of parathyroid hormone, and hyperparathyroidism

INVENTOR(S): Galvin, Rachelle Jeanette; Gitter, Bruce Donald

PATENT ASSIGNEE(S): Eli Lilly and Co., USA

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

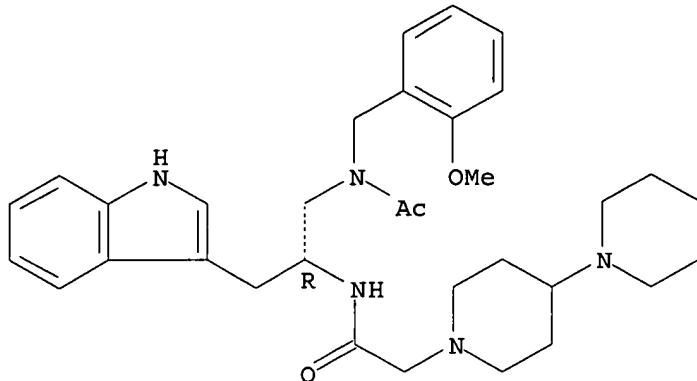
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9843639 | A1 | 19981008 | WO 1998-US6674 | 19980403 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9868833 | A1 | 19981022 | AU 1998-68833 | 19980403 |
| US 6239144 | B1 | 20010529 | US 1999-319388 | 19990527 |
| PRIORITY APPLN. INFO.: | | | US 1997-43909P | P 19970403 |
| | | | WO 1998-US6674 | W 19980403 |

AB The present invention provides methods of treating or preventing conditions assocd. with a lack of parathyroid hormone comprising administering to a mammal in need thereof an effective amt. of a compd. having activity as a tachykinin receptor antagonist. In a most preferred embodiment the present invention provides methods of increasing bone growth in a mammal which comprises administering to a mammal in need thereof an effective amt. of a compd. having activity as a tachykinin receptor antagonist. Another embodiment of this invention provides methods of treating hyperparathyroidism in a mammal comprising administering to a mammal in need thereof an effective amt. of a compd. having activity as a tachykinin receptor antagonist.

IT 167678-33-3
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (tachykinin receptor antagonists for treating bone loss, conditions assocd. with a lack of parathyroid hormone, and hyperparathyroidism)

RN 167678-33-3 CA
 CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-, dihydrochloride, trihydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

● 3 H₂O

IT 167678-33-3 170566-84-4 170567-08-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tachykinin receptor antagonists for treating bone loss, conditions assoc'd. with a lack of parathyroid hormone, and hyperparathyroidism)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 35 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 129:285918 CA

TITLE: Selective neurokinin-1 receptor antagonists are anti-hyperalgesic in a model of neuropathic pain in the guinea pig

AUTHOR(S): Campbell, E. A.; Gentry, C. T.; Patel, S.; Panesar, M. S.; Walpole, C. S. J.; Urban, L.

CORPORATE SOURCE: Novartis Institute for Medical Sciences, London, WC1E 6BN, UK

SOURCE: Neuroscience (Oxford) (1998), 87(3), 527-532
CODEN: NRSCDN; ISSN: 0306-4522

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Neuropathic pain is poorly managed by conventional analgesic therapy, such as non-steroidal anti-inflammatory drugs and opiates. The development of animal models of peripheral neural damage has aided in our understanding of the pathol. and pharmacol. of neuropathic pain. This report is the first clear demonstration using selective neurokinin-1 receptor antagonists of a potentially novel therapeutic approach to the treatment of neuropathic pain resulting from peripheral nerve damage in a guinea-pig model. The neurokinin-1 receptor antagonists, SDZ NKT 343 and LY 303870

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significantly reduced mech. hyperalgesia following oral and intrathecal administration. (R,R)-SDZ NK T343, the enantiomer of SDZ NKT 343 did not show anti-hyperalgesic activity. RPR 100893 showed significant antihyperalgesic activity only following intrathecal administration suggesting poor absorption or low level penetration of the blood-brain barrier. These results imply that neurokinin-1 receptor antagonists offer a new class of anti-hyperalgesic drugs with a largely central site of action in neuropathic pain.

IT 170566-84-4, LY 303870

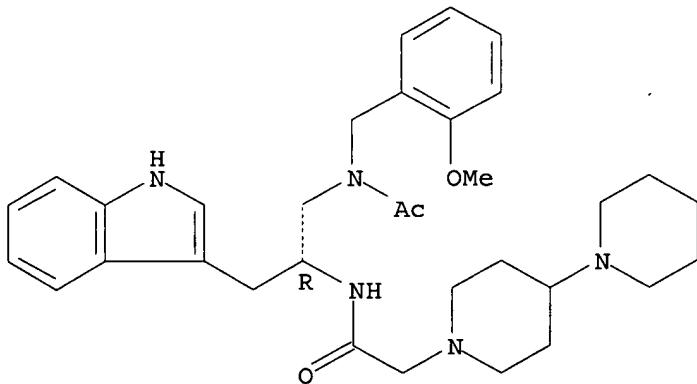
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective NK1 receptor antagonists are anti-hyperalgesic in model of neuropathic pain in the guinea pig)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, LY 303870

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective NK1 receptor antagonists are anti-hyperalgesic in model of neuropathic pain in the guinea pig)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 36 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 129:41128 CA

TITLE: Preparation of heterocyclic [and particularly imidazole-containing] low molecular weight peptidyl compounds as inhibitors of farnesyl-protein transferase

INVENTOR(S): Anthony, Neville J.; Bergman, Jeffrey M.; Dinsmore, Christopher J.; Gomez, Robert P.; MacTough, Suzanne C.; Solinsky, Kelly M.; Williams, Theresa M.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 64 pp., Cont.-in-part of U.S. Ser. No. 468,160, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

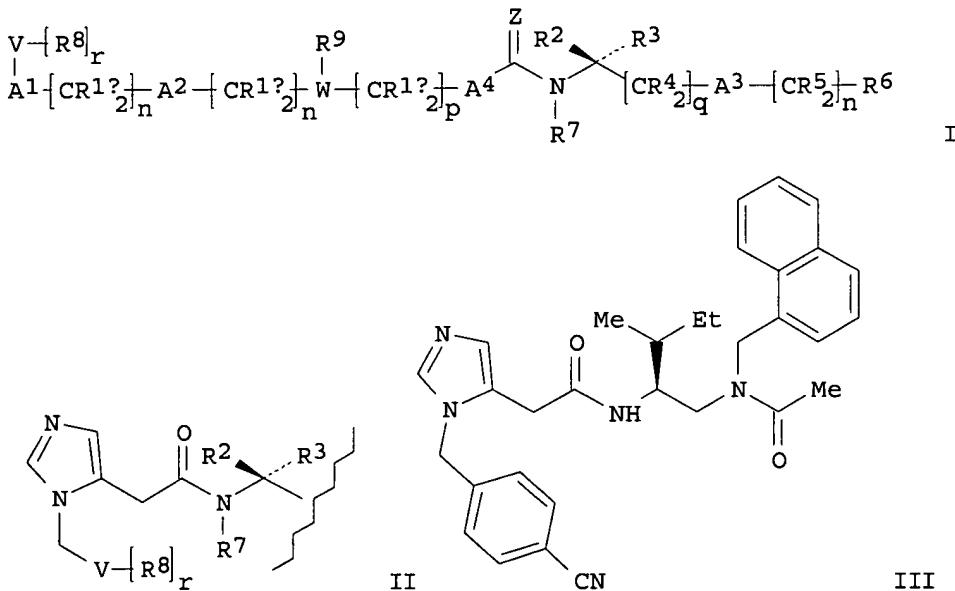
10/019,993

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 5756528 | A | 19980526 | US 1996-652055 | 19960523 |
| CA 2223561 | AA | 19961212 | CA 1996-2223561 | 19960603 |
| US 5972984 | A | 19991026 | US 1997-960248 | 19971029 |
| PRIORITY APPLN. INFO.: | | | US 1995-468160 | 19950606 |
| | | | US 1996-652055 | 19960523 |

OTHER SOURCE(S): MARPAT 129:41128

GI



AB The invention comprises low mol. wt. peptidyl compds. that inhibit the enzyme farnesyl-protein transferase (FPTase). The compds. differ from prior mono- or dipeptidyl analogs previously described as FPTase inhibitors by lacking a thiol moiety. This offers unique advantages (no data) in terms of improved **pharmacokinetic** behavior in animals, prevention of thiol-dependent chem. reactions, such as rapid autoxidn. and disulfide formation with endogenous thiols, and reduced systemic toxicity. Further contained in the invention are chemotherapeutic compns. contg. the compds., and methods for their prodn. A method of inhibition of FPTase by administration of I [R1a = H, aryl, heterocycle, etc.; R1b = H, (un)substituted aryl, heterocycle, etc.; R2, R3 = a side chain of a naturally occurring amino acid, (un)substituted C1-20 alkyl, etc.; R4, R5 = H, (un)substituted C1-6 alkyl, aryl, etc.; R6 = H, aryl, C3-10 cycloalkyl, etc.; R7 = H, (un)substituted aryl, heterocyclyl, etc.; R8 = H, (un)substituted aryl, heterocyclyl, etc.; R9 = H, C2-20 alkenyl, C2-20 alkynyl, etc.; A1-A3 = bond, CH:CH, C.tplbond.C, etc.; A4 = bond, NR7, S, O; V = H, heterocycle, aryl, etc.; W = heterocycle; Z = O, (R1a)₂; n, p, q = 0-4; r = 0-5] is claimed. The subset of imidazole compds. II and their **pharmaceutically acceptable salts**, which inhibit Ras

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farnesyl-transferase, are also claimed per se. For instance, EDC-mediated coupling of N-allyloxycarbonyl-N-(naphth-1-ylmethyl)-2(S)-amino-3(S)-methylpentanamine.HCl with [1-(4-cyanobenzyl)-1H-imidazol-5-yl]acetic acid, followed by Pd-catalyzed deallyloxycarbonylation, and acetylation with AcCl, gave the claimed title compd. III, which was isolated as a trifluoroacetate salt. The compds. showed IC50 values of < 50 .mu.M against human FPTase.

IT 186199-44-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocycle-contg. low mol. peptidyl compds. as inhibitors of farnesyl-protein transferase)

RN 186199-44-0 CA

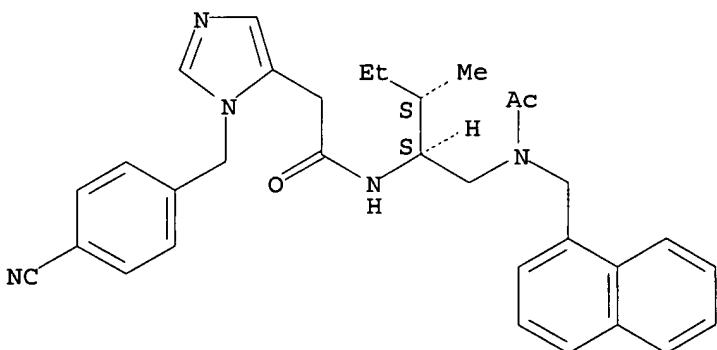
CN 1H-Imidazole-5-acetamide, N-[(1S,2S)-1-[[acetyl(1-naphthylmethyl)amino]methyl]-2-methylbutyl]-1-[(4-cyanophenyl)methyl]-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 186199-43-9

CMF C32 H35 N5 O2

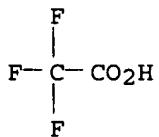
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



IT 186199-44-0P 186199-46-2P 186201-10-5P

186201-11-6P 186201-13-8P 186201-14-9P

186201-15-0P 186201-18-3P 186201-19-4P

186201-61-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

10/019,993

(prep. of heterocycle-contg. low mol. peptidyl compds. as inhibitors of farnesyl-protein transferase)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 37 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 129:23447 CA
TITLE: A method for treating tension-type headache
INVENTOR(S): Olesen, Jes; Bendtsen, Lars; Jensen, Rigmor; Madsen, Ulf
PATENT ASSIGNEE(S): Olesen, Jes, Den.; Bendtsen, Lars; Jensen, Rigmor; Madsen, Ulf
SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 9819674 | A2 | 19980514 | WO 1997-DK502 | 19971104 |
| WO 9819674 | A3 | 19980716 | | |
| W: | AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| AU 9748632 | A1 | 19980529 | AU 1997-48632 | 19971104 |
| AU 734490 | B2 | 20010614 | | |
| EP 1011656 | A2 | 20000628 | EP 1997-911150 | 19971104 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| EP 1132082 | A1 | 20010912 | EP 2000-204625 | 19971104 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | |
| US 6284794 | B1 | 20010904 | US 1999-304115 | 19990504 |
| US 2002072543 | A1 | 20020613 | US 2001-941855 | 20010830 |
| PRIORITY APPLN. INFO.: | | | DK 1996-1243 | A 19961105 |
| | | | US 1996-30294P | P 19961105 |
| | | | EP 1997-911150 | A3 19971104 |
| | | | WO 1997-DK502 | W 19971104 |
| | | | US 1998-85413P | P 19980514 |
| | | | US 1999-304115 | A3 19990504 |

AB Tension-type headache is treated by interacting with neuronal transmission in relation to pain in connection with headache in a way which prevents or decreases sensitization of second order nociceptive neurons. In particular, treatment is performed by administration of an effective amt. of a substance which prevents or decreases central sensitization. Important examples of such substances are substances which interact with glutamate neurotransmission, such as glutamate receptor antagonists. Other examples are e.g. substances which interact with nitric oxide, such as nitric oxide synthase (NOS) inhibitors. According to a broader aspect of the invention, tension-type headache is treated by administration of substances which are effective in preventing or decreasing pain in connection with tension-type headache. An addnl. aspect of the invention

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relates to treatment of tension-type headache by administration of substances which substantially inhibit the activity of NOS. Evidence for central sensitization in chronic myofascial pain, as well as mechanisms of spontaneous tension-type headaches, are also described. Gabapentin and dextromethorphen had a prophylactic effect on chronic tension-type headaches.

IT 170566-84-4, LY 303870

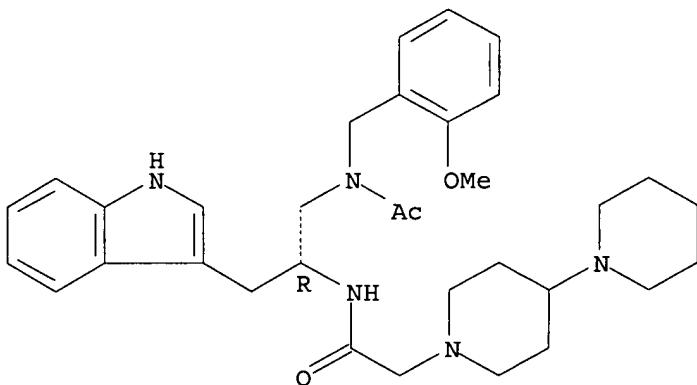
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tension-type headache treatment)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, LY 303870 170566-84-4D, LY 303870, derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tension-type headache treatment)

L15 ANSWER 38 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 128:72247 CA

TITLE: A Targeted Library of Small-Molecule, Tyrosine, and Dual-Specificity Phosphatase Inhibitors Derived from a Rational Core Design and Random Side Chain Variation

AUTHOR(S): Rice, Robert L.; Rusnak, James M.; Yokokawa, Fumiaki; Yokokawa, Shiho; Messner, Donald J.; Boynton, Alton L.; Wipf, Peter; Lazo, John S.

CORPORATE SOURCE: Departments of Pharmacology and Chemistry, University of Pittsburgh, Pittsburgh, PA, 15261, USA

SOURCE: Biochemistry (1997), 36(50), 15965-15974

CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

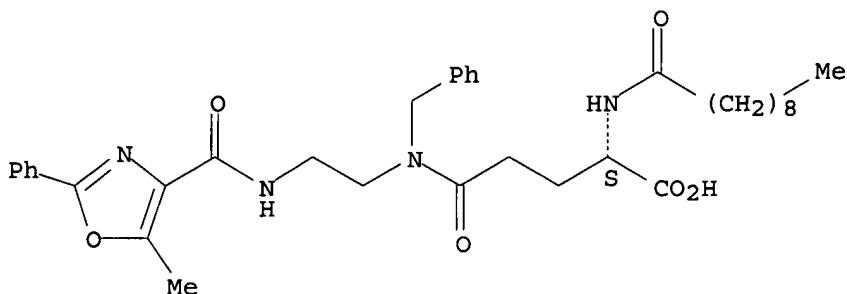
AB Tyrosine phosphatases (PTPases) dephosphorylate phosphotyrosines while dual-specificity phosphatases (DSPases) dephosphorylate contiguous and semicontiguous phosphothreonine and phosphotyrosine on cyclin dependent kinases and mitogen-activated protein kinases. Consequently, PTPases and DSPases have a central role controlling signal transduction and cell cycle

10/019, 993

progression. Currently, there are few readily available potent inhibitors of PTPases or DSPases other than vanadate. Using a **pharmacophore** modeled on natural product inhibitors of phosphothreonine phosphatases, the authors generated a refined library of novel, phosphate-free, small-mol. compds. synthesized by a parallel, solid-phase combinatorial-based approach. Among the initial 18 members of this targeted diversity library, the authors identified several inhibitors of DSPases: Cdc25A, -B, and -C and the PTPase PTP1B. These compds. at 100 μ M did not significantly inhibit the protein serine/threonine phosphatases PP1 and PP2A. Kinetic studies with two members of this library indicated competitive inhibition for Cdc25 DSPases and noncompetitive inhibition for PTP1B. Compd. AC-.alpha..alpha.69 had a K_i of approx. 10 μ M for recombinant human Cdc25A, -B, and -C, and a K_i of 0.85 μ M for the PTP1B. The marked differences in Cdc25 inhibition as compared to PTP1B inhibition seen with relatively modest chem. modifications in the modular side chains demonstrate the structurally demanding nature of the DSPase catalytic site distinct from the PTPase catalytic site. These results represent the first fundamental advance toward a readily modifiable **pharmacophore** for synthetic PTPase and DSPase inhibitors and illustrate the significant potential of a combinatorial-based strategy that supplements the rational design of a core structure by a randomized variation of peripheral substituents.

IT 188403-16-9, AC-.alpha.1. δ .9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(library of small-mol. phosphatase inhibitors with specificity for cyclin-dependent kinase phosphatases and mitogen-activated protein kinase phosphatases)
RN 188403-16-9 CA
CN L-Glutamine, N-[2-[(5-methyl-2-phenyl-4-oxazolyl)carbonyl]amino]ethyl]-N2-(1-oxodecyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 188403-16-9, AC-.alpha.1. δ .9 188403-19-2,
AC-.alpha..alpha.. δ .9 188403-22-7, AC-.alpha.1. δ .. β .
188403-27-2, AC-.alpha..alpha.. δ .. β . 188403-36-3,
AC-.alpha.1. δ .. γ . 188403-42-1, AC-
.alpha..alpha.. δ .. γ .
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(library of small-mol. phosphatase inhibitors with specificity for cyclin-dependent kinase phosphatases and mitogen-activated protein kinase phosphatases)

L15 ANSWER 39 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 128:53244 CA

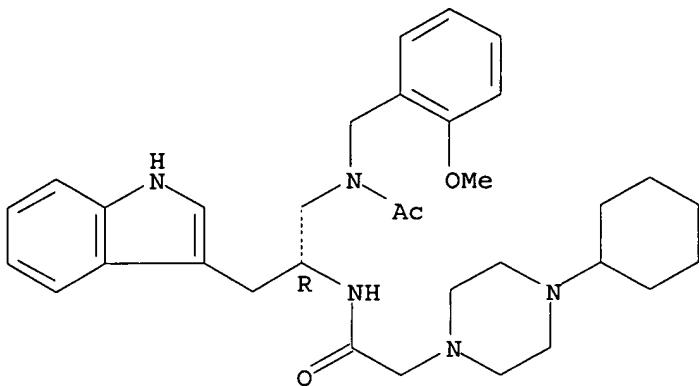
10/019,993

TITLE: Methods of treating hypertension
INVENTOR(S): Gehlert, Donald R.; Steinberg, Mitchell I.
PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Gehlert, Donald R.;
Steinberg, Mitchell I.
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 9744035 | A1 | 19971127 | WO 1997-US9225 | 19970523 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,
VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,
GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
ML, MR, NE, SN, TD, TG | | | |
| AU 9731492 | A1 | 19971209 | AU 1997-31492 | 19970523 |
| EP 912178 | A1 | 19990506 | EP 1997-926817 | 19970523 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI | | | |
| JP 2000511193 | T2 | 20000829 | JP 1997-542963 | 19970523 |
| PRIORITY APPLN. INFO.: | | | US 1996-18266P | P 19960524 |
| | | | WO 1997-US9225 | W 19970523 |

OTHER SOURCE(S): MARPAT 128:53244
AB This invention provides methods of inhibiting pulmonary hypertensive disease which comprise administering to a mammal in need thereof a compd. having activity as a tachykinin receptor antagonist. One of the example compds. prep'd. is (R)-2-[N-[2-[(4-cyclohexyl)piperazin-1-yl]acetyl]amino]-3-(1H-indol-3-yl)-1-[N-(2-methoxybenzyl)acetylamino]propane. Tests for antihypertensive activity are also given.
IT 170567-08-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tachykinin receptor antagonists as antihypertensives)
RN 170567-08-5 CA
CN 1-Piperazineacetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170567-08-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tachykinin receptor antagonists as antihypertensives)

IT 167678-33-3P 175460-97-6P 175460-98-7P

175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tachykinin receptor antagonists as antihypertensives)

IT 170566-84-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tachykinin receptor antagonists as antihypertensives)

L15 ANSWER 40 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 127:293251 CA

TITLE: Methods of treating or preventing interstitial cystitis using piperazinyl- and piperidinyl-containing indole derivatives

INVENTOR(S): Iyengar, Smriti; Muhlhauser, Mark A.; Thor, Karl B.

PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Iyengar, Smriti; Muhlhauser, Mark A.; Thor, Karl B.

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

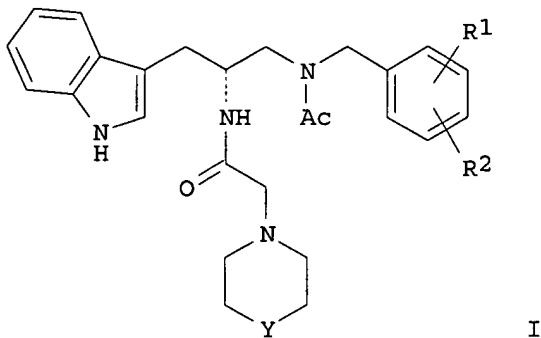
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9733583 | A1 | 19970918 | WO 1997-US3555 | 19970307 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2247822 | AA | 19970918 | CA 1997-2247822 | 19970307 |
| AU 9720714 | A1 | 19971001 | AU 1997-20714 | 19970307 |

10/019,993

| | | | |
|---|-------------|----------------|------------|
| EP 932406 | A1 19990804 | EP 1997-908927 | 19970307 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | |
| JP 2000506527 | T2 20000530 | JP 1997-532693 | 19970307 |
| US 6017930 | A 20000125 | US 1998-125952 | 19980825 |
| PRIORITY APPLN. INFO.: | | US 1996-13130P | P 19960311 |
| | | WO 1997-US3555 | W 19970307 |

OTHER SOURCE(S): MARPAT 127:293251

GI



AB The invention provides methods for the treatment or prevention of interstitial cystitis or urethral syndrome using compds. I [R1, R2 = H, Me, OMe, Cl, CF₃, with the proviso that only 1 may be H; Y = NR, CHR, NRA, or CHNRbRc; R = cyclohexyl, piperidino, or Ph; Ra, Rb, Rc = H, C1-6 alkyl] or their pharmaceutically acceptable salts or solvates.

Detailed preps. of 2 compds. and some of their salts are given. For instance, Ph₃C-D-Trp-OH underwent a sequence of amidation with 2-MeOC₆H₄CH₂NH₂ (95%), redn. of the amide to an amine using RED-AL.RTM. and then N-acetylation using Ac₂O (87%), detritylation (90%), conversion to the di-HCl salt (>98%), and finally amidation with 2-(4-cyclohexylpiperazin-1-yl)acetic acid K salt, to give title compd. I [R1 = 2-OMe, R2 = H, Y = NR, R = cyclohexyl]. Relevant methods for bioassay and clin. evaluation of the compds. are also described (no data).

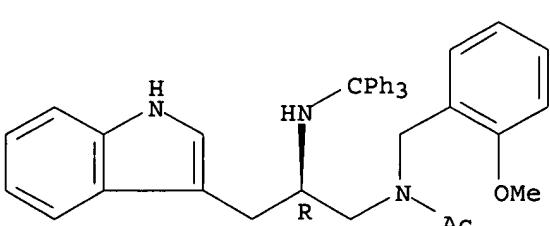
IT 175460-97-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of piperazinyl- and piperidinyl-contg. indole derivs. for treatment of interstitial cystitis)

RN 175460-97-6 CA

CN Acetamide, N-[(2R)-3-(1H-indol-3-yl)-2-[(triphenylmethyl)amino]propyl]-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 175460-97-6P 175460-98-7P 175460-99-8P

10/019,993

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of piperazinyl- and piperidinyl-contg. indole derivs. for treatment of interstitial cystitis)

IT 170508-05-1P 170566-84-4P 170567-08-5P

188949-24-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of piperazinyl- and piperidinyl-contg. indole derivs. for treatment of interstitial cystitis)

L15 ANSWER 41 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 127:176440 CA

TITLE: Indolylpropanediamine derivatives as tachykinin antagonists

INVENTOR(S): Iyengar, Smriti; Phebus, Lee A.; Shannon, Harlan E.

PATENT ASSIGNEE(S): Eli Lilly and Co., USA; Iyengar, Smriti; Phebus, Lee A.; Shannon, Harlan E.

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

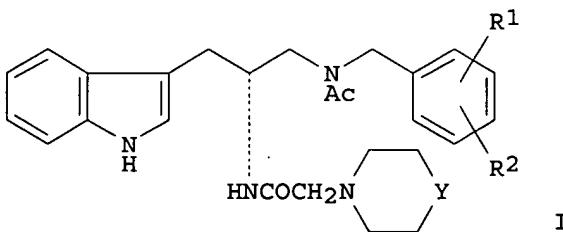
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 9725988 | A1 | 19970724 | WO 1997-US788 | 19970117 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9722438 | A1 | 19970811 | AU 1997-22438 | 19970117 |
| PRIORITY APPLN. INFO.: | | | US 1996-10133P | P 19960117 |
| | | | WO 1997-US788 | W 19970117 |
| OTHER SOURCE(S): | | MARPAT 127:176440 | | |
| GI | | | | |



AB Title compds. I [R1, R2 = H, Me, OMe, Cl, CF₃; Y = NR₃, CHR₃; R₃ = cyclohexyl, piperidino, Ph, H, alkyl, amino] were prep'd. for use as tachykinin antagonists, optionally in combination with non-tachykinin

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antagonist analgesics. Pharmaceutical formulations are also reported. Thus, I [$Y = NR_3$, $R_1 = 2\text{-OMe}$, $R_2 = H$, $R_3 = \text{cyclohexyl}$] was prepd. from D-tryptophan in 7 steps.

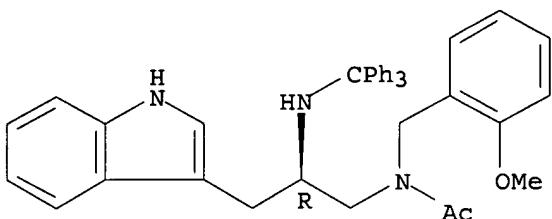
IT 175460-97-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of indolylpropanediamine derivs. as tachykinin antagonists)

BN 175460-97-6 CA

CN Acetamide, N-[(2R)-3-(1H-indol-3-yl)-2-[(triphenylmethyl)amino]propyl]-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 175460-97-6P 175460-98-7P 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of indolylpropanediamine derivs. as tachykinin antagonists)

IT 170508-05-1P 170566-84-4P 170567-08-5P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indolylpropanediamine derivs. as tachykinin antagonists)

115 ANSWER 42 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 127:34521 CA

ACCESSION NUMBER: 127.31521-CH
TITLE: Preparation of hydrazidyl, bis-hydrazidyl, and
bis-aminomethyl carbonyl protease inhibitors

INVENTOR(S) : Carr, Thomas Joseph; Desjarlais, Renee Louise;
Gallagher, Timothy Francis; Halbert, Stacie Marie; Oh,
Hye-Ja; Thompson, Scott Kevin; Veber, Daniel Frank;
Yamashita, Dennis Shinji; et al.

PATENT ASSIGNEE(S) : USA

SOURCE: PCT Int. Appl., 253 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

DOCUMENT TYPE:

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5

FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT INFORMATION:

PATENT NO

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9716433 | A1 | 19970509 | WO 1996-US18000 | 19961030 |
| W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG,
KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG,
SI, SK, TR, TT, UA, US, US,
US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
MR, NE, SN, TD, TG | | | | |
| ZA 9609078 | A | 19980429 | ZA 1996-9078 | 19961029 |
| AU 9711180 | A1 | 19970522 | AU 1997-11180 | 19961030 |

10/019,993

| | | | | |
|--|----|-----------------|----------------|----------|
| CN 1207095 | A | 19990203 | CN 1996-199284 | 19961030 |
| BR 9612344 | A | 19990713 | BR 1996-12344 | 19961030 |
| EP 934291 | A1 | 19990811 | EP 1996-941981 | 19961030 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, FI, RO | | | | |
| NO 9801938 | A | 19980629 | NO 1998-1938 | 19980429 |
| US 5998470 | A | 19991207 | US 1999-290958 | 19990413 |
| US 6057362 | A | 20000502 | US 1999-330287 | 19990611 |
| US 6232342 | B1 | 20010515 | US 1999-330451 | 19990611 |
| US 6284777 | B1 | 20010904 | US 2000-552616 | 20000419 |
| US 6331542 | B1 | 20011218 | US 2000-551968 | 20000419 |
| NO 2000006716 | A | 19980629 | NO 2000-6716 | 20001229 |
| NO 2000006717 | A | 19980629 | NO 2000-6717 | 20001229 |
| NO 2000006718 | A | 19980629 | NO 2000-6718 | 20001229 |
| CN 1341590 | A | 20020327 | CN 2001-104787 | 20010220 |
| CN 1341592 | A | 20020327 | CN 2001-104788 | 20010220 |
| CN 1341593 | A | 20020327 | CN 2001-104789 | 20010220 |
| US 2002077455 | A1 | 20020620 | US 2001-839410 | 20010420 |
| US 2002173469 | A1 | 20021121 | US 2002-160314 | 20020530 |
| PRIORITY APPLN. INFO.: | | | | |
| | | US 1995-8108P | P | 19951030 |
| | | US 1995-7473P | P | 19951122 |
| | | US 1995-8992P | P | 19951221 |
| | | US 1996-13747P | P | 19960320 |
| | | US 1996-13748P | P | 19960320 |
| | | US 1996-13764P | P | 19960320 |
| | | US 1996-17455P | P | 19960517 |
| | | US 1996-17892P | P | 19960517 |
| | | US 1996-22047P | P | 19960722 |
| | | US 1996-23494P | P | 19960807 |
| | | WO 1996-US18000 | W | 19961030 |
| | | US 1997-793915 | A3 | 19970214 |
| | | US 1998-793915 | B3 | 19980430 |
| | | US 1999-330284 | B1 | 19990611 |
| | | US 1999-330305 | B1 | 19990611 |
| | | US 2000-633700 | B1 | 20000807 |

OTHER SOURCE(S): MARPAT 127:34521

AB Title compds. of formula D-CO-Q [D = CbzNHCH(Bu-i), Cbz-Leu-NHCH(Bu-i), 4-PhOC₆H₄SO₂NHCH₂, Cbz-Leu-NHNH, etc.; Q = NHCH(Bu-i)(2-carboxythiazol-4-yl), NHCH(Bu-i)(4-carboethoxythiazol-2-yl), NHNHC(OH)(Bu-i)NHCbz, CH₂NHSO₂C₆H₄-4-OPh, etc.; Cbz = PhCH₂O₂C] and pharmaceutical compns. of such compds., which inhibit proteases, including cathepsin K (no data) were prep'd. Such compds. are particularly useful for treating diseases of excessive bone loss or cartilage or matrix degrdn., e.g. osteoporosis, periodontitis, and arthritis. For example, Cbz-Leu-Leu-CH₂Br was treated with H₂NCSO₂Et in refluxing ethanol for 4 h to give Cbz-Leu-NHCH(Bu-i)(2-carboethoxythiazol-4-yl), which was saponified by treatment with sodium hydroxide in THF to yield title compd. Cbz-Leu-NHCH(Bu-i)(2-carboxythiazol-4-yl).

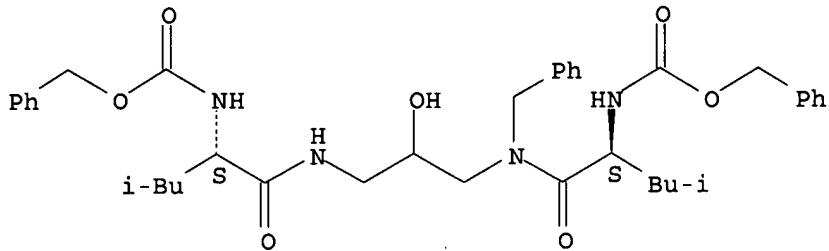
IT 190660-88-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

RN 190660-88-9 CA

CN 2,5,9,12-Tetraazatridecanedioic acid, 7-hydroxy-3,11-bis(2-methylpropyl)-4,10-dioxo-5-(phenylmethyl)-, bis(phenylmethyl) ester, (3S,11S)-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 190660-88-9P 190900-99-3DP, resin-bound
 190901-05-4DP, resin-bound
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (prepn. of hydrazidyl, bis-hydrazidyl, and bis-aminomethyl carbonyl protease inhibitors)

L15 ANSWER 43 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 126:220304 CA

TITLE: Combinatorial synthesis and biological evaluation of library of small-molecule Ser/Thr-protein phosphatase inhibitors

AUTHOR(S): Wipf, Peter; Cunningham, April; Rice, Robert L.; Lazo, John S.

CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, 15260, USA

SOURCE: Bioorganic & Medicinal Chemistry (1997), 5(1), 165-177
 CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In eukaryotes, phosphorylation of serine, threonine, and tyrosine residues on proteins is a fundamental post-translational regulatory process for such functions as signal transduction, gene transcription, RNA splicing, cellular adhesion, apoptosis, and cell cycle control. Based on functional groups present in natural product serine/threonine protein phosphatase (PSTPase) inhibitors, we have designed **pharmacophore** model and demonstrated the feasibility of a combinatorial chem. approach for the prepn. of functional analogs of the model. Preliminary biol. testing of 18 structural variants of the model has identified two compds. with growth inhibitory activity against cultured human breast cancer cells. In vitro inhibition of the PSTPase PP2A was demonstrated with one of the compds. Using flow cytometry, it was obsd. that one compd. caused prominent inhibition in the G1 phase of the cell cycle. Thus, the combinatorial modifications of the minimal **pharmacophore** can generate biol. interesting antiproliferative agents.

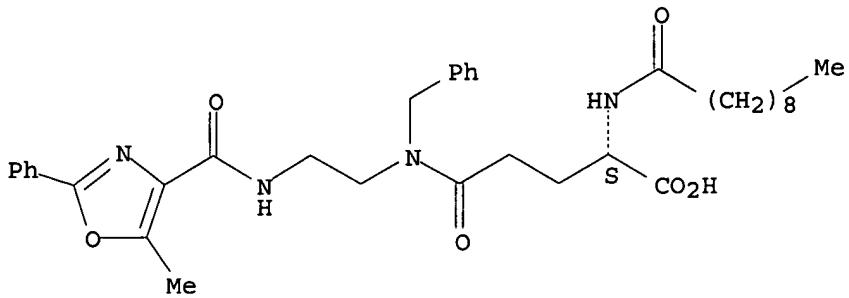
IT 188403-16-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (combinatorial synthesis and biol. evaluation of library of small-mol. Ser/Thr-protein phosphatase inhibitors)

RN 188403-16-9 CA

CN L-Glutamine, N-[2-[[[(5-methyl-2-phenyl-4-oxazolyl)carbonyl]amino]ethyl]-N2-(1-oxodecyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 188403-16-9P 188403-19-2P 188403-22-7P
 188403-27-2P 188403-36-3P 188403-42-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (combinatorial synthesis and biol. evaluation of library of small-mol. Ser/Thr-protein phosphatase inhibitors)

L15 ANSWER 44 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 126:195101 CA

TITLE: Peripheral effects of three novel non-peptide tachykinin NK1 receptor antagonists in the anesthetized rat

AUTHOR(S): Cellier, Eric; Fayolle, Christine; Hipskind, Philip A.; Iyengar, Smriti; Couture, Rejean

CORPORATE SOURCE: Department of Physiology, Faculty of Medicine, Universite de Montreal, C.P. 6128, Succursale Centre-Ville, Montreal, Quebec, Can.

SOURCE: European Journal of Pharmacology (1996), 318(2/3), 377-385

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Three novel non-peptide tachykinin NK1 receptor antagonists were assessed on the transient fall in mean arterial blood pressure and the salivation induced by i.v. substance P (0.65 nmol/kg) in the urethane-anesthetized rat. LY303241 ((R)-1-[N-(2-methoxybenzyl)acetylamino]-3-(1H-indol-3-yl)-2-[N-(2-(4-phenylpiperazin-1-yl)acetyl)amino]propane), LY303870 ((R)-1-[N-(2-methoxybenzyl)acetylamino]-3-(1H-indol-3-yl)-2-[N-(2-(4-(piperidin-1-yl)piperidin-1-yl)acetyl)amino]propane) and LY306740 ((R)-1-[N-(2-methoxybenzyl)acetylamino]-3-(1H-indol-3-yl)-2-[N-(2-(4-cyclohexylpiperazin-1-yl)acetyl)amino]propane) (65 nmol-9 .mu.mol/kg i.v.; 5 min earlier) inhibited both the vasodepressor and salivary responses to substance P in a dose-dependent manner. LY303241 and LY306740 were more potent in inhibiting the vascular response to substance P while LY303870 was more potent in inhibiting the salivary response. LY303870 and LY306740 were devoid of direct effects while LY303241 decreased blood pressure and heart rate for 1 and 10 min, resp. The antagonists act in a stereoselective and specific manner since the opposite (S) enantiomers of LY303870 (LY306155) and LY306740 (LY307679) failed to block the effects of substance P. In addn., LY303241, LY303870 and LY306740 neither affected the hypotension and the salivation induced by carbachol nor the increases in mean arterial pressure and heart rate induced by the tachykinin NK receptor agonist [-Ala]neurokinin A-(4-10). Only LY303241 attenuated the decreases in mean arterial pressure and heart rate evoked by the

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tachykinin NK3 receptor agonist senktide. LY303870 and LY306740 appear to be the most interesting antagonists since they act in a specific and selective manner at the tachykinin NK1 receptor. The difference in the order of potency of the three antagonists to inhibit the hypotension and salivation elicited by substance P could be ascribed to their pharmacodynamic features or to the existence of different signal transduction mechanisms or receptor subtypes.

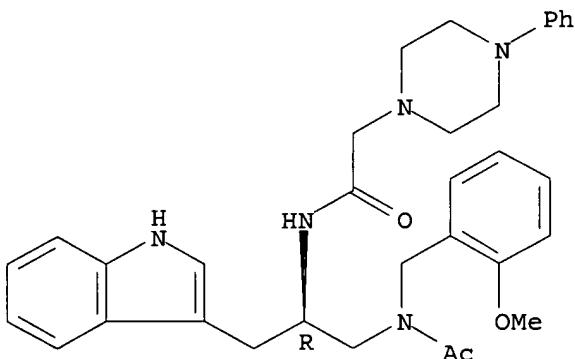
IT 170566-51-5, LY 303241

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peripheral effects of three novel non-peptide tachykinin NK1 receptor antagonists in anesthetized rat)

RN 170566-51-5 CA

CN 1-Piperazineacetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-4-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-51-5, LY 303241 170566-84-4, LY 303870

170567-08-5, LY 306740

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peripheral effects of three novel non-peptide tachykinin NK1 receptor antagonists in anesthetized rat)

L15 ANSWER 45 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 126:117978 CA

TITLE: Preparation of heterocycle-containing low molecular peptidyl compounds as inhibitors of farnesyl-protein transferase

INVENTOR(S): Anthony, Neville J.; Solinsky, Kelly M.; Gomez, Robert P.; Williams, Theresa M.; Bergman, Jeffrey M.; DeSolms, S. Jane; Dinsmore, Christopher J.; MacTough, Suzanne C.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA; Anthony, Neville J.; Solinsky, Kelly M.; Gomez, Robert P.; Williams, Theresa M.; Bergman, Jeffrey M.; DeSolms, S. Jane; Dinsmore, Christopher J.; MacTough, Suzanne C.

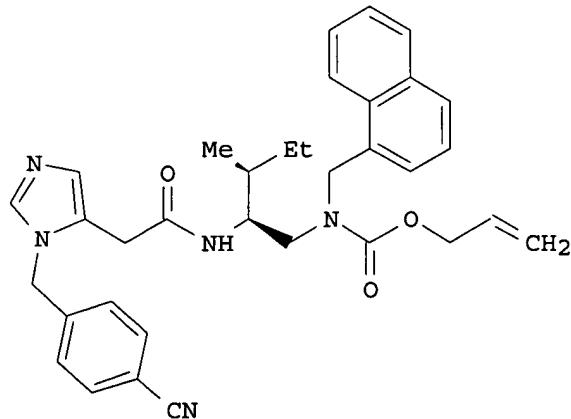
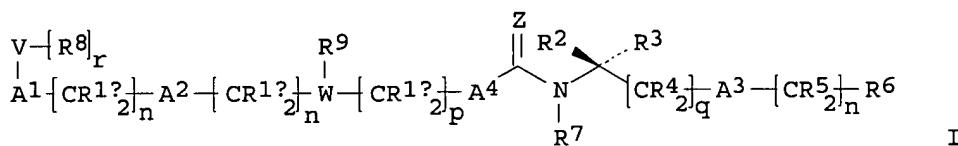
SOURCE: PCT Int. Appl., 237 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|-------------------|----------|-----------------|----------|
| WO 9639137 | A1 | 19961212 | WO 1996-US8740 | 19960603 |
| W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2223561 | AA | 19961212 | CA 1996-2223561 | 19960603 |
| AU 9661505 | A1 | 19961224 | AU 1996-61505 | 19960603 |
| AU 708564 | B2 | 19990805 | | |
| EP 833633 | A1 | 19980408 | EP 1996-919068 | 19960603 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRIORITY APPLN. INFO.: | | | US 1995-468160 | 19950606 |
| | | | WO 1996-US8740 | 19960603 |
| OTHER SOURCE(S): | MARPAT 126:117978 | | | |
| GI | | | | |



II

AB The title compds. [I; R1a = H, aryl, heterocycle, etc.; R1b = H, (un)substituted aryl, heterocycle, etc.; R2, R3 = a side chain of a naturally occurring amino acid, (un)substituted C1-20 alkyl, etc.; R4, R5 = H, (un)substituted C1-6 alkyl, aryl, etc.; R6 = H, aryl, C3-10 cycloalkyl, etc.; R7 = H, (un)substituted aryl, heterocyclyl, etc.; R8 = H, (un)substituted aryl, heterocyclyl, etc.; R9 = H, C2-20 alkenyl, C2-20 alkynyl, etc.; A1-A3 = a bond, CH:CH, C.tplbond.C, etc.; A4 = a bond, NR7, S, O; V = H, heterocycle, aryl, etc.; W = heterocycle; Z = O, (R1a)2; n, p, q = 0-4; r = 0-5], which differ from the mono- or dipeptidyl analogs previously described as inhibitors of farnesyl-protein transferase in that they do not have a thiol moiety, were prep'd. The lack of the thiol offers

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unique advantages in terms of improved **pharmacokinetic** behavior in animals, prevention of thiol-dependent chem. reactions, such as rapid autoxidn. and formation with endogenous thiols, and reduced systemic toxicity. Coupling N-allyloxycarbonyl-N-naphth-1-ylmethyl-2(S)-amino-3(S)-methylpentanamine.HCl with [1-(4-cyanobenzyl)-1H-imidazol-5-yl]acetic acid in the presence of HOBT, Et₃N, EDC in DMF afforded the title compd. 2(S),3(S)-II.HCl. In general, compds. I showed IC₅₀ of < 50 .μ.M against human FPTase.

IT 186199-44-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of heterocycle-contg. low mol. peptidyl compds. as inhibitors of farnesyl-protein transferase)

RN 186199-44-0 CA

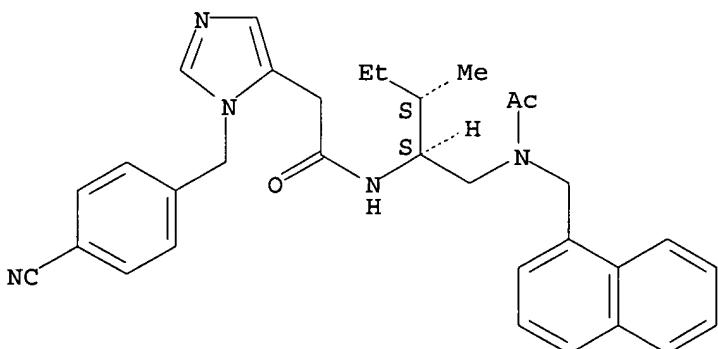
CN 1H-Imidazole-5-acetamide, N-[(1S,2S)-1-[[acetyl(1-naphthalenylmethyl)amino]methyl]-2-methylbutyl]-1-[(4-cyanophenyl)methyl]-, trifluoroacetate (2:5) (9CI) (CA INDEX NAME)

CM 1

CRN 186199-43-9

CMF C32 H35 N5 O2

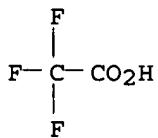
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



IT 186199-44-0P 186199-46-2P 186201-10-5P

186201-11-6P 186201-13-8P 186201-14-9P

186201-15-0P 186201-18-3P 186201-19-4P

186201-61-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

10/019,993

BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocycle-contg. low mol. peptidyl compds. as inhibitors
of farnesyl-protein transferase)

L15 ANSWER 46 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 126:99332 CA

TITLE: Use of tachykinin receptors antagonists for the
treatment of cold and allergic rhinitis

INVENTOR(S): Gilfillan, Derek James; Iyengar, Smirti; Johnson, Kirk
Willis; Mitchell, Malcolm Ian; Phebus, Lee Alan

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| EP 747055 | A2 | 19961211 | EP 1996-304170 | 19960606 |
| EP 747055 | A3 | 19970205 | | |
| WO 9641631 | A1 | 19961227 | WO 1996-US8335 | 19960603 |
| W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS,
JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW,
MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG,
US, UZ | | | | |
| RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
NE, SN, TD, TG | | | | |
| AU 9659660 | A1 | 19970109 | AU 1996-59660 | 19960603 |
| PRIORITY APPLN. INFO.: | | | US 1995-97P | P 19950609 |
| | | | WO 1996-US8335 | W 19960603 |

AB Methods are provided for the treatment or amelioration of the symptoms of
the common cold or allergic rhinitis. The methods comprise administering
to a mammal in need thereof a compd. having activity as a tachykinin
receptor antagonist. Prepn. of selected tachykinin antagonists, e.g.
(R)-2-[N-(2-((4-cyclohexyl)piperazin-1-yl)acetyl)amino]-3-(1H-indol-3-yl)-
1-[N-(2-methoxybenzyl)acetylamino]propane, is included. NK-1 and NK-2
receptor binding assays are described, as are active-ingredient
formulations.

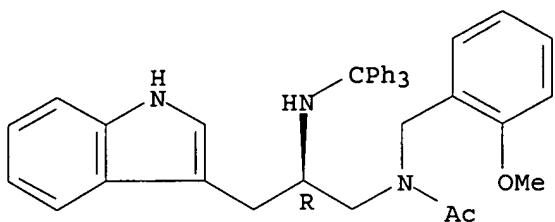
IT 175460-97-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and reaction; tachykinin receptors antagonists, prepns., and
pharmaceutical compns. for the treatment of cold and allergic
rhinitis)

RN 175460-97-6 CA

CN Acetamide, N-[(2R)-3-(1H-indol-3-yl)-2-[(triphenylmethyl)amino]propyl]-N-
[(2-methoxyphenyl)methyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 175460-97-6P 175460-98-7P 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; tachykinin receptors antagonists, prepn., and pharmaceutical compns. for the treatment of cold and allergic rhinitis)

IT 167678-33-3P 170566-84-4P 170567-08-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(tachykinin receptors antagonists, prepn., and pharmaceutical compns. for the treatment of cold and allergic rhinitis)

L15 ANSWER 47 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 126:99331 CA

TITLE: Use of tachykinin antagonists in combination with serotonin agonists or serotonin reuptake inhibitors for the manufacture of a medicament for the treatment of common cold or allergic rhinitis

INVENTOR(S): Johnson, Kirk Willis; Phebus, Lee Alan

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA

SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 747049 | A1 | 19961211 | EP 1996-304183 | 19960606 |
| R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| WO 9641633 | A1 | 19961227 | WO 1996-US8336 | 19960603 |
| W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9659661 | A1 | 19970109 | AU 1996-59661 | 19960603 |
| PRIORITY APPLN. INFO.: | | | US 1995-74P | P 19950608 |
| | | | WO 1996-US8336 | W 19960603 |

AB Methods are provided for the treatment or amelioration of the symptoms of the common cold or allergic rhinitis which comprise administering to a mammal in need thereof a combination of a tachykinin receptor antagonist and either a serotonin agonist or a selective serotonin reuptake inhibitor. The administration may be concurrent or sequential, with either of the two activities being administered first. Compd. prepn. and active-ingredient formulations are included.

10/019,993

IT 175460-97-6P

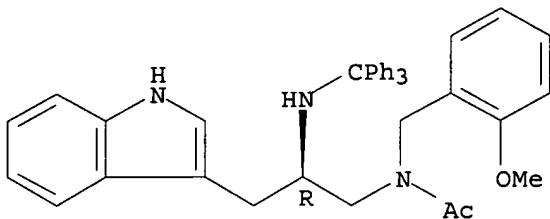
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; tachykinin antagonist combination with serotonin agonist or serotonin reuptake inhibitor for treatment of common cold or allergic rhinitis, compd. prepn., and pharmaceutical formulations)

RN 175460-97-6 CA

CN Acetamide, N-[(2R)-3-(1H-indol-3-yl)-2-[(triphenylmethyl)amino]propyl]-N-[(2-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 175460-97-6P 175460-98-7P 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; tachykinin antagonist combination with serotonin agonist or serotonin reuptake inhibitor for treatment of common cold or allergic rhinitis, compd. prepn., and pharmaceutical formulations)

IT 167678-33-3P 170566-84-4P 170567-08-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(tachykinin antagonist combination with serotonin agonist or serotonin reuptake inhibitor for treatment of common cold or allergic rhinitis, compd. prepn., and pharmaceutical formulations)

L15 ANSWER 48 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 125:339038 CA

TITLE: A tachykinin receptor antagonist and a serotonin agonist for treating or preventing pain or nociception

INVENTOR(S): Johnson, Kirk W.; Phebus, Lee A.

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|--|----------|-----------------|----------|
| WO 9629074 | A1 | 19960926 | WO 1996-US4198 | 19960320 |
| W: | AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI | | | |
| RW: | KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML | | | |

10/019,993

AU 9655289 A1 19961008 AU 1996-55289 19960320
PRIORITY APPLN. INFO.: US 1995-408238 19950322
WO 1996-US4198 19960320

OTHER SOURCE(S): MARPAT 125:339038

AB This invention provides methods for the treatment or prevention of pain or nociception which comprises administering to a mammal in need thereof a combination of a tachykinin receptor antagonist and either a serotonin agonist or a selective serotonin reuptake inhibitor. This administration may be concurrent or sequential, with either of the two activities being administered first. Synthesis of several tachykinin receptor antagonists, such as (R)-2-[N-(2-((4-cyclohexyl)piperazin-1-yl)acetyl)amino]-3-(1H-indol-3-yl)-1-[N-(2-methoxybenzyl)acetylamino]propane, is presented and various pharmaceutical formulations were proposed.

IT 183231-16-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(combination of serotonin agonist and tachykinin receptor antagonist for preventing or treating pain)

RN 183231-16-5 CA

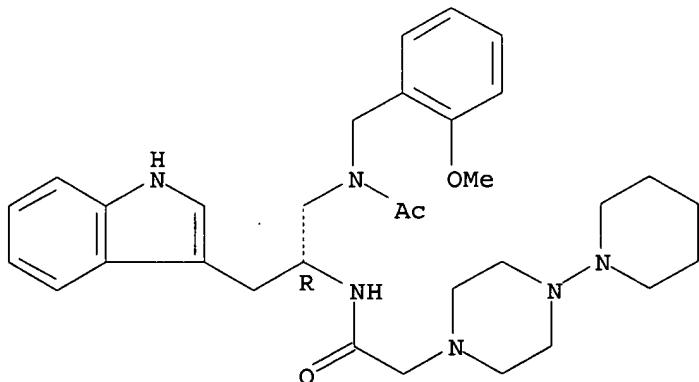
CN 1-Piperazineacetamide, N-[2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-4-(1-piperidinyl)-, (R)-, ethanedioate (1:2) (9CI)
(CA INDEX NAME)

CM 1

CRN 183231-13-2

CMF C32 H44 N6 O3

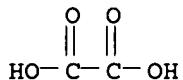
Absolute stereochemistry.



CM 2

CRN 144-62-7

CMF C2 H2 O4



IT 183231-16-5P

10/019,993

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(combination of serotonin agonist and tachykinin receptor antagonist for preventing or treating pain)

IT 170567-08-5P 183231-13-2P 183231-17-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(combination of serotonin agonist and tachykinin receptor antagonist for preventing or treating pain)

IT 175460-97-6P 175460-98-7P 175460-99-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(combination of serotonin agonist and tachykinin receptor antagonist for preventing or treating pain)

L15 ANSWER 49 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 125:257222 CA

TITLE: Methods of treating or preventing psychiatric disorders

INVENTOR(S): Johnson, Kirk W.; Phebus, Lee A.

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|----------|
| WO 9624353 | A1 | 19960815 | WO 1996-US1737 | 19960208 |
| W: | AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI | | | |
| RW: | KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE | | | |
| AU 9649187 | A1 | 19960827 | AU 1996-49187 | 19960208 |
| PRIORITY APPLN. INFO.: | | | US 1995-387056 | 19950210 |
| | | | WO 1996-US1737 | 19960208 |

AB This invention provides methods for the treatment or prevention of psychiatric disorders which comprises administering to a mammal a combination of a tachykinin receptor antagonist and either a serotonin agonist or a selective serotonin reuptake inhibitor. This administration may be concurrent or sequential, with either of the 2 activities being administered first. The psychiatric disorders which may be treated by the methods of the invention include panic disorder, panic attack, depression, anxiety, obsessive-compulsive disorder, post-traumatic stress disorder, borderline personality disorder, etc. Thus, (R)-2-[N-(2-((4-cyclohexyl)piperazin-1-yl)acetyl)amino]-3-(1H-indol-3-yl)-1-[N-(2-methoxybenzyl)acetylamino]propane was prep'd. by a series of steps starting from D-tryptophan. Hard gelatin capsules were each prep'd. contg. active ingredient(s) 30.0, starch 305.0, and Mg stearate 5.0 mg. Radioreceptor binding assay studies performed by using the active ingredients on NK-1 or NK-2 receptors showed that the compds. were effective antagonists of these receptors.

IT 170566-84-4P

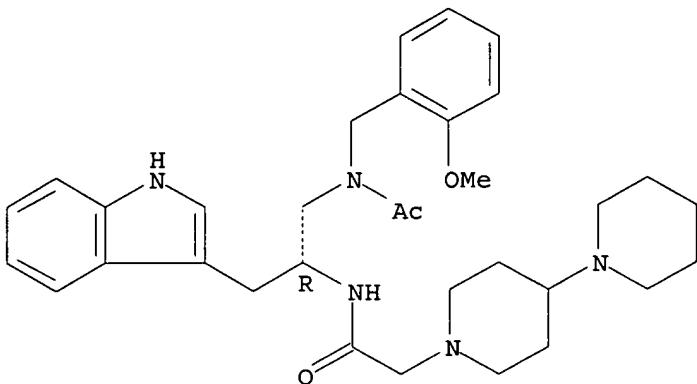
10/019,993

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (methods of treating or preventing psychiatric disorders)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4P 170567-08-5P 182317-87-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (methods of treating or preventing psychiatric disorders)

IT 175460-97-6P 175460-98-7P 175460-99-8P

182317-88-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods of treating or preventing psychiatric disorders)

L15 ANSWER 50 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 125:67748 CA

TITLE: Methods of treating migraine with a tachykinin antagonist and a serotonin agonist

INVENTOR(S): Cohen, Marlene Lois; Johnson, Kirk Willis; Phebus, Lee Alan

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|--|----------|-----------------|----------|
| WO 9611000 | A1 | 19960418 | WO 1995-US13087 | 19951004 |
| W: | AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN | | | |
| RW: | KE, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |

10/019,993

| | | | | |
|---|----|----------|-----------------|------------|
| US 5744482 | A | 19980428 | US 1994-318391 | 19941005 |
| ZA 9508173 | A | 19970401 | ZA 1995-8173 | 19950928 |
| EP 710479 | A1 | 19960508 | EP 1995-307000 | 19951003 |
| EP 710479 | B1 | 19990107 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| AT 175347 | E | 19990115 | AT 1995-307000 | 19951003 |
| ES 2125567 | T3 | 19990301 | ES 1995-307000 | 19951003 |
| AU 9641301 | A1 | 19960502 | AU 1996-41301 | 19951004 |
| PRIORITY APPLN. INFO.: | | | US 1994-318391 | A 19941005 |
| | | | WO 1995-US13087 | W 19951004 |

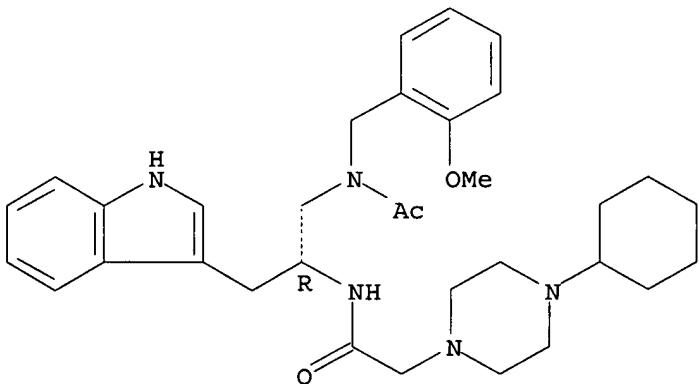
AB This invention provides methods for the treatment or prevention of migraines which comprises administering to a mammal in need thereof a combination of a tachykinin receptor antagonist and a serotonin agonist. This administration may be concurrent or sequential, with either of the two activities being administered first.

IT 170567-08-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (methods of treating migraine with a tachykinin antagonist and a serotonin agonist)

BN 170567-08-5 CA

CN 1-Piperineacetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170567-08-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (methods of treating migraine with a tachykinin antagonist and a serotonin agonist)

IT 170566-84-4

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(methods of treating migraine with a tachykinin antagonist and a serotonin agonist)

L15 ANSWER 51 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 124:343300 CA

TITLE: Preparation of imidazoline derivatives as tachykinin receptor antagonists

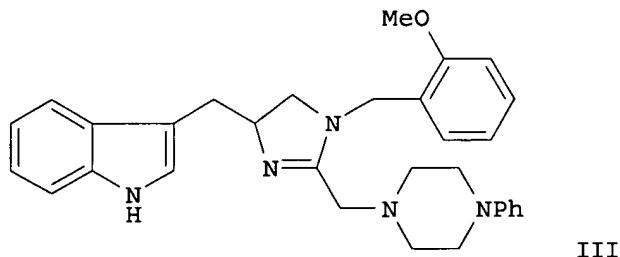
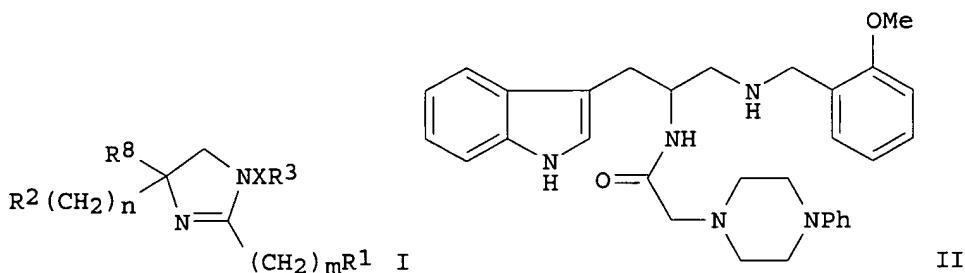
INVENTOR(S) : Hipskind, Philip Arthur; Howbert, James Jeffry; Muehl,

10/019, 993

Brian Stephen
PATENT ASSIGNEE(S) : Lilly, Eli, and Co., USA
SOURCE: Can. Pat. Appl., 61 pp.
CODEN: CPXXEB

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| CA 2151113 | AA | 19951211 | CA 1995-2151113 | 19950606 |
| US 6175013 | B1 | 20010116 | US 1994-257966 | 19940610 |
| EP 699665 | A1 | 19960306 | EP 1995-303820 | 19950605 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| JP 07330736 | A2 | 19951219 | JP 1995-141893 | 19950608 |
| PRIORITY APPLN. INFO.: | | | US 1994-257966 | A 19940610 |
| OTHER SOURCE(S): MARPAT 124:343300 | | | | |
| GI | | | | |



AB The invention provides novel substituted 2-imidazolines I [X = (CHR4)p(CHR6)q; m, n, p, q = 0, 1; R1 = H, (un)substituted trityl, Ph, Ph2CH, PhO, PhS, piperazinyl, piperidinyl, indolyl, amino, leaving group, NHCH2R5, etc.; R2 = (un)substituted Ph, 2- or 3-indolyl or -indolinyl, benzothienyl, benzofuranyl, naphthyl; R3 = (un)substituted Ph, phenylalkylidene, cycloalkyl, alkyl, H, alkenyl, cycloalkenyl; R4, R6 = H, alkyl; R5 = pyridyl, anilinoalkylidene, anilinocarbonyl] and their salts and solvates. The compds. are useful in the treatment or prevention of a variety of physiol. disorders assocd. with an excess of tachykinins. For example, Boc-Trp-OH was converted in 4 steps to intermediate II, which was cyclized in 83% yield in refluxing 1,2-Cl2C6H4 to give title compd. III. In NK-1 and NK-2 receptor binding assays, III had IC50 values of 0.12 and 0.47 .mu.M, resp.

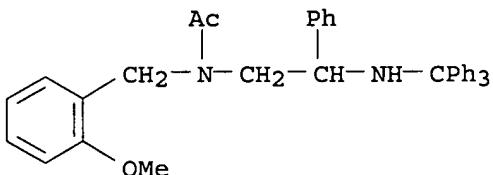
IT 170568-08-8P

10/019,993

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of imidazoline derivs. as tachykinin receptor antagonists)

RN 170568-08-8 CA

CN Acetamide, N-[(2-methoxyphenyl)methyl]-N-[2-phenyl-2-[(triphenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)



IT 170568-08-8P 170568-10-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of imidazoline derivs. as tachykinin receptor antagonists)

L15 ANSWER 52 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 124:290273 CA

TITLE: Preparation of peptide analogs as inhibitors of interleukin-1 beta converting enzyme (ICE)

INVENTOR(S): Bemis, Guy W.; Golec, Julian M. C.; Lauffer, David J.; Mullican, Michael D.; Murcko, Mark A.; Livingston, David J.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorp., USA

SOURCE: PCT Int. Appl., 374 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

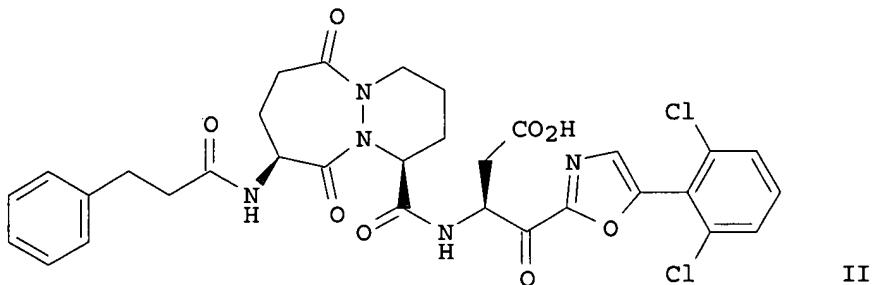
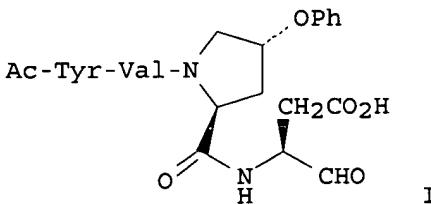
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------------|-----------------|----------|
| WO 9535308 | A1 | 19951228 | WO 1995-US7617 | 19950616 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5756466 | A | 19980526 | US 1994-261452 | 19940617 |
| US 5656627 | A | 19970812 | US 1995-405581 | 19950317 |
| US 5847135 | A | 19981208 | US 1995-440898 | 19950525 |
| AU 9529446 | A1 | 19960115 | AU 1995-29446 | 19950616 |
| AU 709114 | B2 | 19990819 | | |
| EP 784628 | A1 | 19970723 | EP 1995-925257 | 19950616 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| BR 9508051 | A | 19971021 | BR 1995-8051 | 19950616 |
| JP 10504285 | T2 | 19980428 | JP 1996-502478 | 19950616 |
| NO 9605365 | A | 19970217 | NO 1996-5365 | 19961213 |
| FI 9605036 | A | 19970214 | FI 1996-5036 | 19961216 |
| US 6420522 | B1 | 20020716 | US 1999-430822 | 19991029 |
| PRIORITY APPLN. INFO.: | | US 1994-261452 | A | 19940617 |

| | |
|----------------|-------------|
| US 1995-405581 | A 19950317 |
| US 1995-440898 | A 19950525 |
| US 1995-465216 | A3 19950605 |
| WO 1995-US7617 | W 19950616 |

OTHER SOURCE(S) :
GI

MARPAT 124:290273



AB Novel classes of compds. are prep'd., which are characterized by specific structural and physicochem. features comprising (a) a first and a second hydrogen bonding moiety, each of said moieties being capable of forming a hydrogen bond with a different backbone atom of ICE selected from the carbonyl O and the amide NH group of Arg-341 Ser-339, (b) a first and a second moderately hydrophobic moiety, said moieties each being capable of assocg. with a sep. binding pocket of ICE when the inhibitor is bound thereto, said binding pocket being selected from the P2, P3, P4, and P' binding pockets, and (c) an electroneg. moiety comprising .gtoreq.1 electroneg. atoms, said atoms being attached to the same atom or to adjacent atoms in the moiety and said moiety being capable of forming .gtoreq.1 hydrogen bonds or salts bridges with residues in the P1 binding pocket of ICE. These compds. and pharmaceutical compns. of this invention are particularly well suited for inhibiting ICE activity and consequently may be advantageously used as agents against interleukin-1 mediated diseases, including inflammatory diseases, autoimmune diseases and neurodegenerative diseases. Thus, etherification of Me N-tert-butoxycarbonyl-cis-4-hydroxyprolinate with phenol using Ph3P and di-Et azodicarboxylate in THF to Me N-tert-butoxycarbonyl-cis-4-phenoxyprolinate followed by deprotection with HCl in EtOAc to Me 4-phenoxyprolinate hydrochloride and condensation with Ac-Tyr-Val-OH using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride, HOBT, and diisopropylethylamine in DMF gave Me N-acetyl-L-tyrosinyl-L-valyl-(4-phenoxy)prolinate. Sapon. of the latter peptide ester with LiOH in aq. THF to N-acetyl-L-tyrosinyl-L-valyl-(phenoxy)proline followed by condensation with N-allyloxycarbonyl-4-amino-5-benzyloxy-2-oxotetrahydrofuran gave N-[N-acetyl-L-tyrosinyl-L-valyl-(4-phenoxy)prolinyl]-4-amino-5-benzyloxy-2-oxotetrahydrofuran (1:1 diastereomer mixt.), which underwent hydrogenolysis over Pd(OH)2 in MeOH under H atm. to give the title compd. (I). In a IL-1.β assay with a mixed population of human peripheral blood mononuclear cells or enriched

10/019, 993

yl)piperidin-1-yl)acetyl]amino]-propane}, was 1,000- to 15,000-fold less potent in all the species examined. LY303870 antagonized in vitro NK-1 receptor effects as demonstrated by blockade of SP-stimulated phosphoinositide turnover in U-11 MG human astrocytoma cells ($K_i = 1.4$ nM) and interleukin-6 secretion from U-373 MG human astrocytoma cells ($K_i = 5$ nM). In addn., LY303870 inhibited SP-induced rabbit vena cava contractions ($pA_2 = 9.4$) with high (50,000-fold) selectivity vs. NK-2 or NK-3 receptor-mediated responses. In vivo, LY303870 inhibited [$\text{Sar}_9, \text{-Met(O}_2\text{)}_{11}$]-SP induced guinea pig bronchoconstriction ($ED_{50} = 75$ $\mu\text{g/kg i.v.}$) and pulmonary microvascular leakage in the bronchi ($ED_{50} = 12.8$ $\mu\text{g/kg i.v.}$) and trachea ($ED_{50} = 18.5$ $\mu\text{g/kg i.v.}$). Therefore, LY303870 is a potent and selective NK-1 receptor antagonist in vitro and in vivo. The use of LY303870 will facilitate a better understanding of NK-1 receptors in physiol. processes.

IT 170566-84-4, LY 303870

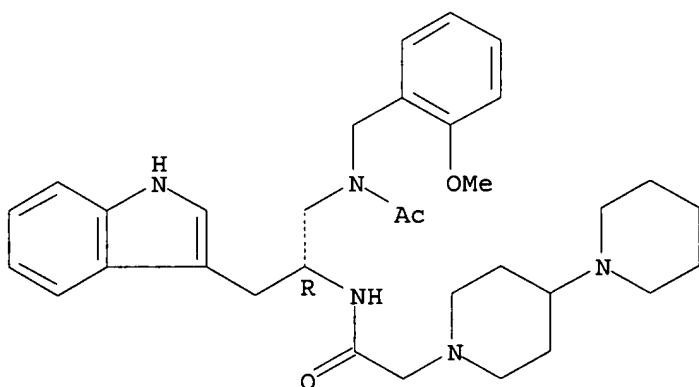
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(pharmacol. characterization of neurokinin-1 receptor antagonist LY303870)

RN 170566-84-4 CA

CN [1,4'-Bipiperidine]-1'-acetamide, N-[(1R)-2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 170566-84-4, LY 303870

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(pharmacol. characterization of neurokinin-1 receptor antagonist LY303870)

L15 ANSWER 54 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 123:339728 CA

TITLE: Non-peptide tachykinin receptor antagonists

INVENTOR(S): Cho, Sung-Yong Stephen; Crowell, Thomas Alan; Gitter, Bruce Donald; Hipskind, Philip Arthur; Howbert, James Jeffry; Krushinski, Joseph Herman, Jr.; Lobb, Karen Lynn; Muehl, Brian Stephen; Nixon, James Arthur

PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA

SOURCE: PCT Int. Appl., 152 pp.

CODEN: PIXXD2

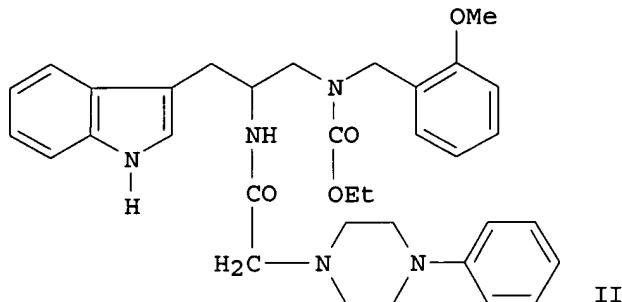
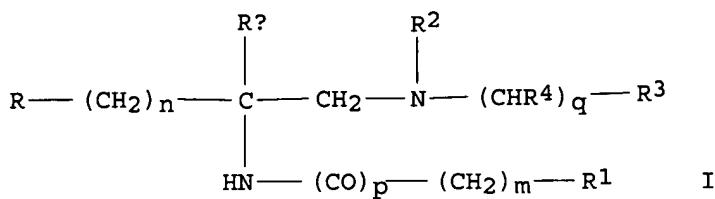
10/019,993

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 9514017 | A1 | 19950526 | WO 1994-US13222 | 19941116 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN | | | | |
| RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 6403577 | B1 | 20020611 | US 1993-153847 | 19931117 |
| ZA 9408926 | A | 19960510 | ZA 1994-8926 | 19941110 |
| CA 2176735 | AA | 19950526 | CA 1994-2176735 | 19941116 |
| AU 9510988 | A1 | 19950606 | AU 1995-10988 | 19941116 |
| EP 729468 | A1 | 19960904 | EP 1995-901928 | 19941116 |
| EP 729468 | B1 | 20030115 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| CN 1141043 | A | 19970122 | CN 1994-194790 | 19941116 |
| CN 1078889 | B | 20020206 | | |
| JP 09505304 | T2 | 19970527 | JP 1994-514583 | 19941116 |
| HU 76269 | A2 | 19970728 | HU 1996-1304 | 19941116 |
| BR 9408063 | A | 19990824 | BR 1994-8063 | 19941116 |
| RU 2140921 | C1 | 19991110 | RU 1996-113087 | 19941116 |
| TW 412512 | B | 20001121 | TW 1994-83110634 | 19941116 |
| PL 180150 | B1 | 20001229 | PL 1994-331233 | 19941116 |
| US 5670499 | A | 19970923 | US 1995-462415 | 19950605 |
| US 5684033 | A | 19971104 | US 1995-463874 | 19950605 |
| FI 9602074 | A | 19960515 | FI 1996-2074 | 19960515 |
| NO 9602012 | A | 19960708 | NO 1996-2012 | 19960515 |
| AU 9897255 | A1 | 19990225 | AU 1998-97255 | 19981221 |
| AU 721935 | B2 | 20000720 | | |

PRIORITY APPLN. INFO.: US 1993-153847 A 19931117
AU 1995-10988 A3 19941116
WO 1994-US13222 W 19941116

OTHER SOURCE(S): CASREACT 123:339728; MARPAT 123:339728
GI



AB The invention provides a novel series of non-peptide compds. I [m, n, p = 0, 1; q = 0, 1, 2; R = (un)substituted Ph, 2- or 3-indolyl or -indolinyl, benzothienyl, benzofuranyl, or naphthyl; R1 = (un)substituted trityl, Ph, PhO, PhS, piperazinyl, piperidinyl, pyrrolidinyl, morpholinyl, indolyl, amino, H, leaving group, etc.]; R2 = H, alkyl, arylsulfonyl, alkylsulfonyl, carboxyalkyl, alkoxy carbonylalkyl, acyl; R3 = H, (un)substituted Ph, phenylalkyl, (cyclo)alk(en)yl, naphthyl; R4 = H, alkyl; R3 .noteq. H or alk(en)yl if R1 = H or halo] and their salts and solvates. The compds. are useful in the treatment or prevention of physiol. disorders assocd. with excess tachykinins. This invention also provides methods of treatment and pharmaceutical formulations employing I. Over 170 examples were prep'd. and tested for biol. activity, and 11 formulations are described. For instance, activation of N-(tert-butoxycarbonyl)tryptophan with carbonyldiimidazole (CDI) and reaction with 2-MeOC₆H₄CH₂NH₂ gave 80.8% of the corresponding 2-methoxybenzylamide, which was deprotected (94.2%), reduced at the amide carbonyl with BH₃.SMe₂, coupled with Na 2-(4-phenylpiperazin-1-yl)acetic acid using CDI, and N-acylated with ClCO₂Et and Et₃N, to give title compd. II. This compd. had IC₅₀ values of 1.7 and 1000 nM for binding to human NK-1 and NK-2 receptors, resp., in cultured cell assays.

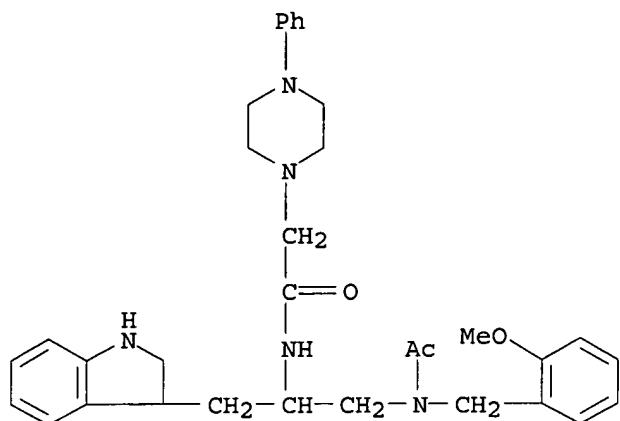
IT 170567-77-8P

RL: BYP (Byproduct); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(byproduct; prepn. of non-peptide tachykinin receptor antagonists)

RN 170567-77-8 CA

CN 1-Piperazineacetamide, N-[2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-[(2,3-dihydro-1H-indol-3-yl)methyl]ethyl]-4-phenyl- (9CI) (CA INDEX NAME)



IT 170567-77-8P

RL: BYP (Byproduct); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(byproduct; prepn. of non-peptide tachykinin receptor antagonists)

IT 170568-21-5P 170568-22-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of non-peptide tachykinin receptor antagonists)

IT 170566-45-7P 170566-46-8P 170566-47-9P

170566-48-0P 170566-49-1P 170566-50-4P

170566-51-5P 170566-52-6P 170566-53-7P

170566-54-8P 170566-55-9P 170566-56-0P

170566-57-1P 170566-58-2P 170566-59-3P

170566-63-9P 170566-64-0P 170566-65-1P

170566-66-2P 170566-67-3P 170566-68-4P

170566-69-5P 170566-79-7P 170566-80-0P

170566-81-1P 170566-82-2P 170566-83-3P

170566-84-4P 170566-85-5P 170566-88-8P

170566-89-9P 170566-90-2P 170566-91-3P

170566-92-4P 170566-93-5P 170566-94-6P

170566-95-7P 170566-96-8P 170566-97-9P

170566-98-0P 170566-99-1P 170567-00-7P

170567-01-8P 170567-02-9P 170567-03-0P

170567-04-1P 170567-05-2P 170567-06-3P

170567-07-4P 170567-08-5P 170567-09-6P

170567-10-9P 170567-11-0P 170567-12-1P

170567-13-2P 170567-14-3P 170567-15-4P

170567-16-5P 170567-17-6P 170567-18-7P

170567-19-8P 170567-20-1P 170567-21-2P

170567-22-3P 170567-23-4P 170567-24-5P

170567-25-6P 170567-26-7P 170567-27-8P

170567-28-9P 170567-29-0P 170567-30-3P

170567-31-4P 170567-32-5P 170567-33-6P

170567-36-9P 170567-37-0P 170567-39-2P

170567-40-5P 170567-41-6P 170567-42-7P

170567-46-1P 170567-47-2P 170567-48-3P

170567-49-4P 170567-50-7P 170567-51-8P

170567-52-9P 170567-57-4P 170567-58-5P

170567-59-6P 170567-60-9P 170567-61-0P

170567-62-1P 170567-63-2P 170567-64-3P

170567-71-2P 170567-72-3P 170567-73-4P

170567-74-5P 170567-75-6P 170567-76-7P

10/019,993

170567-77-8P 170567-78-9P 170567-79-0P
170567-80-3P 170567-81-4P 170567-82-5P
170567-92-7P 170567-93-8P 170567-94-9P
170567-95-0P 170568-08-8P 170568-09-9P
170568-10-2P 170568-25-9P 170568-26-0P
170568-27-1P 170568-28-2P 170568-29-3P
170568-30-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of non-peptide tachykinin receptor antagonists)

IT 170568-23-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; prepn. of non-peptide tachykinin receptor antagonists)

L15 ANSWER 55 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 123:330860 CA

TITLE: Tocolytic oxytocin receptor antagonists

INVENTOR(S): Bock, Mark G.; Evans, Ben E.; Culberson, J. Christopher; Gilbert, Kevin F.; Rittle, Kenneth E.; Williams, Peter D.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

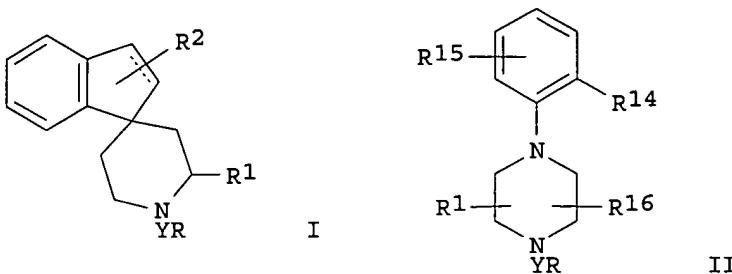
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|----------|
| WO 9525443 | A1 | 19950928 | WO 1995-US3738 | 19950323 |
| W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5464788 | A | 19951107 | US 1994-217270 | 19940324 |
| CA 2186129 | AA | 19950928 | CA 1995-2186129 | 19950323 |
| AU 9521952 | A1 | 19951009 | AU 1995-21952 | 19950323 |
| AU 686792 | B2 | 19980212 | | |
| EP 751773 | A1 | 19970108 | EP 1995-914875 | 19950323 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| JP 09512521 | T2 | 19971216 | JP 1995-524838 | 19950323 |
| US 5756504 | A | 19980526 | US 1996-718415 | 19960923 |
| PRIORITY APPLN. INFO.: | | | US 1994-217270 | 19940324 |
| | | | WO 1995-US3738 | 19950323 |
| OTHER SOURCE(S): | | MARPAT 123:330860 | | |
| GI | | | | |

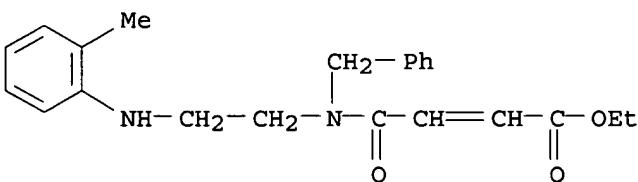


AB Spiroindenenepiperidine derivs. I [R1 = H, C1-5 alkyl, CN, CO2H, Ph, etc.; R2 = H, PhCH2, C3-8 cycloalkyl, C1-5 alkyl; Y = CO2, C(O)NR2, C(:NR2), SO2, C(O)(CH2)n, (CH2)p, (CH2)pC(O); R = (tetrahydro)naphthyl, (substituted) cyclohexyl, (substituted) Ph, heterocyclyl; bond in cyclopentane ring is single or double; n = 0-3; p = 1-3] and phenylpiperazine derivs. II (Y, R, R1 as above; R14, R15 = H, C1-5 alkyl, C1-5 alkoxy, halo, NO2, CN; R16 = H, :O) and their pharmaceutically acceptable salts and esters are useful as oxytocin and vasopressin receptor antagonists for treatment of preterm labor and dysmenorrhea and for stopping labor prior to cesarean delivery. Thus, 1-[2-methoxy-4-[1-[2-(N-cyclopropylamino)ethylsulfonyl]-4-piperidyloxy]phenylacetyl]-4-(2-methylphenyl)piperazine-2-carboxamide (III) was prep'd. in 11 steps from 4-hydroxypiperidine, Me 2,4-dihydroxybenzoate, 2-benzylaminoethanol, o-toluidine, 2,3-dibromopropionamide, and cyclopropylamine. III competed with 1 nM oxytocin-3H for binding to rat uterine tissue with an IC50 of 20 nM.

IT 170930-07-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(tocolytic oxytocin receptor antagonists)

BN 170930-07-1 CA

CN 2-Butenoic acid, 4-[[2-[(2-methylphenyl)amino]ethyl](phenylmethyl)amino]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



IT 170930-07-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tocolytic oxytocin receptor antagonists)

L15 ANSWER 56 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 122:230112 CA

TITLE: Synthesis and structure-activity relationships of 2-(substituted)-3-[3-(N,N-dimethylamino)propyl]-1,3-thiazolidin-4-ones and related analogues acting as H1-histamine antagonists

AUTHOR(S) : Diurno, M. Vittoria; Greco, Giovanni; Mazzoni, Orazio;
Novellino, Ettore; Calignano, Antonio; La Rana,

10/019, 993

CORPORATE SOURCE: Giovanna; Barbieri, Antonio; Bolognese, Adele
Dipartimento di Chimica Farmaceutica e Tossicologica,
Universita di Napoli "Federico II", Naples, 80131,
Italy

SOURCE: Medicinal Chemistry Research (1994), 4(9), 578-87
CODEN: MCREEB; ISSN: 1054-2523

PUBLISHER: Birkhaeuser
DOCUMENT TYPE: Journal
LANGUAGE: English

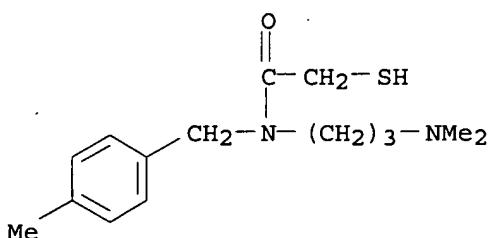
AB Analogs of 2-(4-methylphenyl)-3-[3-(N,N-dimethylamino)propyl]-1,3-thiazolidin-4-one, recently reported as a new H1-histamine antagonist, have been synthesized and tested for their H1-antihistaminic and sedative activities. Structural modifications have specifically involved the 2-aryl-1,3-thiazolidin-4-one moiety with the aim to derive useful structure-activity relationships and hoping to detect more potent compds. The results of the present study have led to a more precise definition of some **pharmacophoric** elements. Moreover, among the newly synthesized set of analogs, 2-(4-methylphenyl)-5-methyl-3-[3-(N,N-dimethylamino)propyl]-1,3-thiazolidin-4-one (as 1 of a set of 2 racemic mixts.) was found to be slightly more potent than mepyramine on the H1-receptor and, at the same time, about four times less sedative than the ref. drug.

IT 162321-78-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and structure-activity relationships of (dimethylamino)propylthiazolidinones and related analogs acting as H1-histamine antagonists)

RN 162321-78-0 CA

CN Acetamide, N-[3-(dimethylamino)propyl]-2-mercaptop-N-[(4-methylphenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 162321-78-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis and structure-activity relationships of (dimethylamino)propylthiazolidinones and related analogs acting as H1-histamine antagonists)

L15 ANSWER 57 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 115:28908 CA

TITLE: Preparation of cinnamamide derivatives as antihyperlipidemics

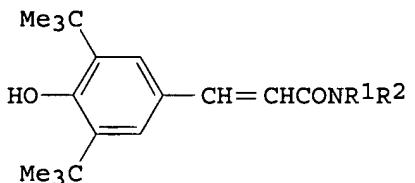
10/019,993

INVENTOR(S) : Fuse, Yoshihide; Fujii, Kenji; Kameyama, Keiji;
Kawabe, Taizo; Miwa, Toshiaki; Katsumi, Ikuo
PATENT ASSIGNEE(S) : Kanegafuchi Chemical Industry Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 44 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------|------|----------|-----------------|----------|
| EP 407200 | A1 | 19910109 | EP 1990-307375 | 19900705 |
| EP 407200 | B1 | 19940601 | | |
| R: BE, CH, DE, FR, GB, IT, LI, NL, SE | | | | |
| CA 2020437 | AA | 19910106 | CA 1990-2020437 | 19900705 |
| JP 03275657 | A2 | 19911206 | JP 1990-179138 | 19900705 |
| US 5294643 | A | 19940315 | US 1990-548121 | 19900705 |
| US 5294624 | A | 19940315 | US 1992-914298 | 19920715 |
| US 5352677 | A | 19941004 | US 1992-914753 | 19920715 |
| PRIORITY APPLN. INFO.: | | | JP 1989-174820 | 19890705 |
| | | | JP 1989-174821 | 19890705 |
| | | | JP 1989-174822 | 19890705 |
| | | | JP 1990-9528 | 19900118 |
| | | | JP 1990-9529 | 19900118 |
| | | | JP 1990-9530 | 19900118 |
| | | | US 1990-548121 | 19900705 |

OTHER SOURCE(S) : MARPAT 115:28908

GI



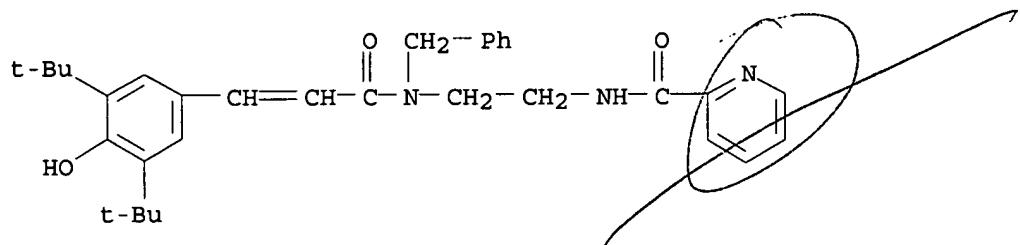
AB Title compds. I [R1 = H, C1-8 alkyl, carboxyalkyl, alkoxyalkyl, alkylamino, (phenylalkyl)amino, substituted piperazinyl, alkylimidazolyl, [(thiazolylamino)carbonyl]alkyl, etc.; R2 = H, C1-5 alkyl, Ph(CH2)n, n = 1-3; R1R2N = (substituted) heterocyclyl], are prep'd. 3,5,4-(Me3C)2(HO)C6H2CH:CHCO2H and PhCH2NH2 were dissolved in CH2Cl2, then 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide-HCl was added, and the mixt. reacted for 2 h at room temp., the reaction mixt. washed with H2O and concd. under reduced pressure to give after chromatog. I (R1 = PhCH2, R2 = H) (II). In rats, II at 10 mg/kg-day decreased 30% cholesterol level. Addnl. 93 I compds. were prep'd. and showed excellent antihyperlipidemic efficacy. Pharmaceutical formulations of I were given.

IT 134502-69-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prep'n. of, as antihyperlipidemic)

RN 134502-69-5 CA

10/019, 993

CN 2-Pyridinecarboxamide, N-[2-[[3-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxo-2-propenyl](phenylmethyl)amino]ethyl] - (9CI) (CA INDEX NAME)



IT 134502-69-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as antihyperlipidemic)

L15 ANSWER 58 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 114:6304 CA

TITLE: Preparation of carbostyryl derivatives and their pharmaceutical compositions as blood platelet aggregation inhibitors

INVENTOR(S): Nishi, Takao; Komatsu, Makoto; Koga, Yasuo; Shu, Yoshio; Tamura, Katsumi

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 260 pp.
CODEN: PIXXD2

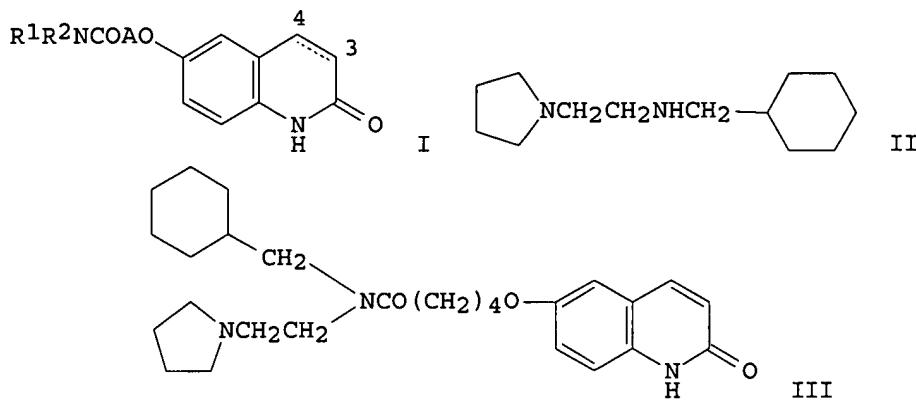
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|-------------|
| WO 8910919 | A1 | 19891116 | WO 1989-JP464 | 19890502 |
| W: DK, KR, US | | | | |
| RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| JP 02049768 | A2 | 19900220 | JP 1989-109466 | 19890428 |
| JP 2753622 | B2 | 19980520 | | |
| EP 450066 | A1 | 19911009 | EP 1989-905166 | 19890502 |
| EP 450066 | B1 | 19960911 | | |
| R: CH, DE, FR, GB, IT, LI, NL, SE | | | | |
| DK 8906722 | A | 19900220 | DK 1989-6722 | 19891229 |
| KR 125919 | B1 | 19971226 | KR 1989-72502 | 19891229 |
| US 5227381 | A | 19930713 | US 1992-929097 | 19920813 |
| US 5401740 | A | 19950328 | US 1994-273624 | 19940712 |
| PRIORITY APPLN. INFO.: | | | JP 1988-109534 | A 19880502 |
| | | | WO 1989-JP464 | W 19890502 |
| | | | US 1989-449849 | B1 19891227 |
| | | | US 1992-929097 | A3 19920813 |
| | | | US 1993-44663 | B1 19930409 |

OTHER SOURCE(S): MARPAT 114:6304
GI



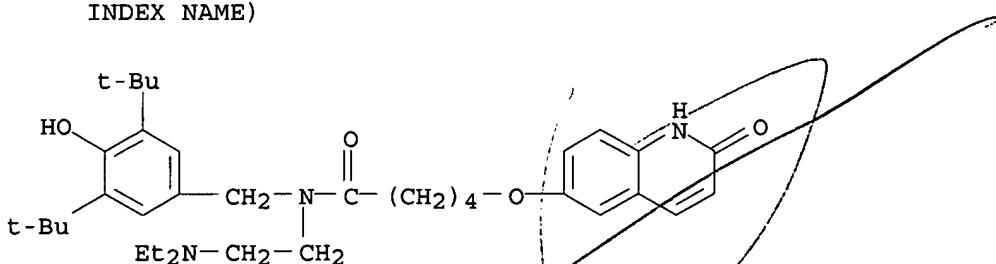
AB Carbostyryl derivs. [I; R1 = cycloalkyl, cycloalkylalkyl, aralkyl, alkylpiperidylalkyl, etc.; R2 = (substituted) heterocyclalkyl, (tetrahydropyranylthio)alkyl, pyridylthioalkyl, (substituted) alkyl; A = alkylene; 3,4-satd. or unsatd.] are prep'd. DBU (1.40 g) was added to a suspension of 2.00 g 6-(4-carboxybutoxy)carbostyryl in CHCl₃ with stirring at room temp., 1.05 g ClCO₂CHMe₂ was added under cooling, followed by 1.61 g amine II with stirring at room temp. to give 1.00 g carbostyryl deriv. II. Similarly prep'd. was 129 addnl. I which showed IC₅₀ of 0.071-7.0 μ M against collagen-induced platelet aggregation. Tablet, capsule, and injection formulations were given.

IT 127402-15-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as blood platelet aggregation inhibitor)

RN 127402-15-7 CA

CN Pentanamide, N-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]-N-[(diethylamino)ethyl]-5-[(1,2-dihydro-2-oxo-6-quinolinyl)oxy]- (9CI) (CA INDEX NAME)



IT 127402-15-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as blood platelet aggregation inhibitor)

L15 ANSWER 59 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 113:190946 CA

ACCESSION NUMBER: 113-196916 CA
TITLE: Preparation of cinnamamide derivatives as pulse regulators and vasodilators

INVENTOR(S): Sekiya, Tetsuo; Tsutsui, Mikio; Kikuchi, Junko; Hori, Daijiro; Ishibashi, Akira; Suzuki, Junko

PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan

10/019,993

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

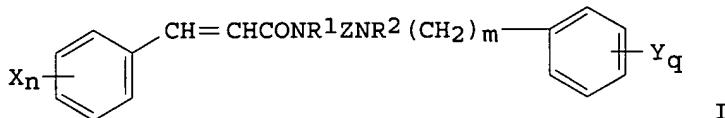
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

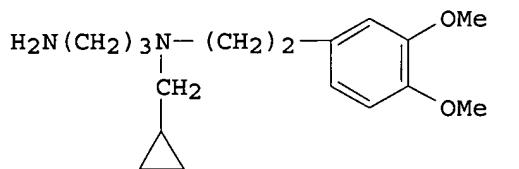
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|----------|
| JP 02138161 | A2 | 19900528 | JP 1988-293112 | 19881119 |
| PRIORITY APPLN. INFO.: | | | JP 1988-293112 | 19881119 |
| OTHER SOURCE(S): | | MARPAT 113:190946 | | |

GI



I



II

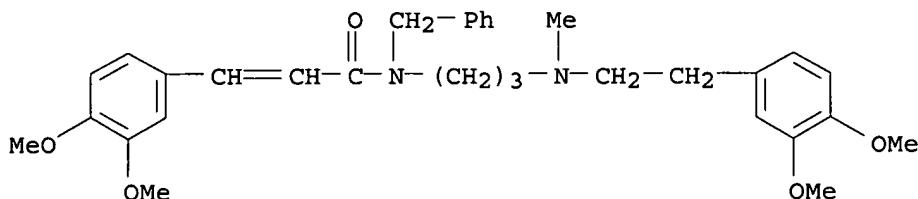
AB Cinnamamide derivs. [I; X, Y = H, halo, CF₃, C₂-5 alkyl, alkoxy; Z = (substituted) C₂-4 alkylene; R₁ = H, C₂-8 alkyl, PhCH₂, R₁NZ = heterocyclyl; R₂ = C₁-8 alkyl, PhCH₂; m, n, q = 1-3] and their pharmaceutically acceptable salts are prep'd. ClCO₂Et was added to a soln. of cinnamic acid and Et₃N in CH₂Cl₂ under cooling and the mixt. stirred at room temp., amine II was added with stirring to give 54% I [X = H, Y_q = 3,4-(MeO)₂, R₂ = H, R₂ = cyclopropylmethyl, m = 2, Z = (CH₂)₃]. Also prep'd. were 45 addnl. I. I showed heartbeat regulatory activity at 3.0 .mu.M and 53.9% vasodilating activity at 10 .mu.M.

IT 129989-57-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as heartbeat regulator and vasodilator)

RN 129989-57-7 CA

CN 2-Propenamide, 3-[(3,4-dimethoxyphenyl)-N-[3-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]propyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 129989-57-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as heartbeat regulator and vasodilator)

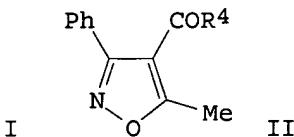
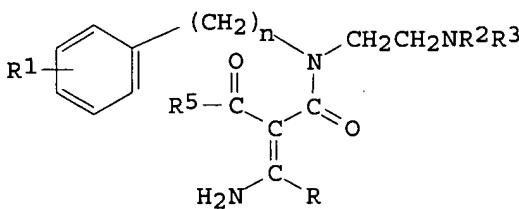
10/019, 993

L15 ANSWER 60 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 108:150066 CA
TITLE: Preparation of N,N-disubstituted alkenamides and phenylalkenamides as antidiabetic agents
INVENTOR(S): Nadelson, Jeffrey
PATENT ASSIGNEE(S): Sandoz Pharmaceuticals Corp., USA
SOURCE: U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 505,804, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 4681898 | A | 19870721 | US 1984-608126 | 19840508 |
| PRIORITY APPLN. INFO.: | | | US 1981-330601 | 19811214 |
| | | | US 1983-505804 | 19830620 |

OTHER SOURCE(S): CASREACT 108:150066

GI



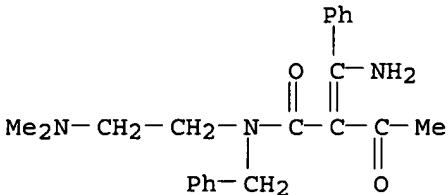
AB The title amides [I; R = alkyl, Ph, $R_1C_6H_4$; R1 = H, halo, alkyl, alkoxy; R2, R3 = alkyl; $R_2R_3 = (CH_2)4-6$; R_2R_3N = morpholino; R5 = H, C1-6 alkyl; n = 0, 1] and their pharmaceutically acceptable salts, useful as antidiabetics and hypoglycemics, are prep'd. A soln. of phenylisoxazole deriv. II ($R_4 = Cl$) in THF was added to a mixt. of $Me_2NCH_2CH_2NPh$ and Et_3N in THF under cooling and stirred at room temp. to give amide II ($R_4 = Me_2NCH_2CH_2NPh$), which was hydrogenated over 10% Pd-C at 50-60.degree. and 50 psi H to give I (R = Ph, R1 = H, R2 = R3 = R5 = Me, n = 0), which (350 mg) was formulated with 150 mg lactose to give a capsule showing ED25 of 74 mg/kg p.o. in treating diabetes in mammals, vs. 110 mg/kg with tolbutamide.

IT 88098-99-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as hypoglycemic agent)

RN 88098-99-1 CA

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-3-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

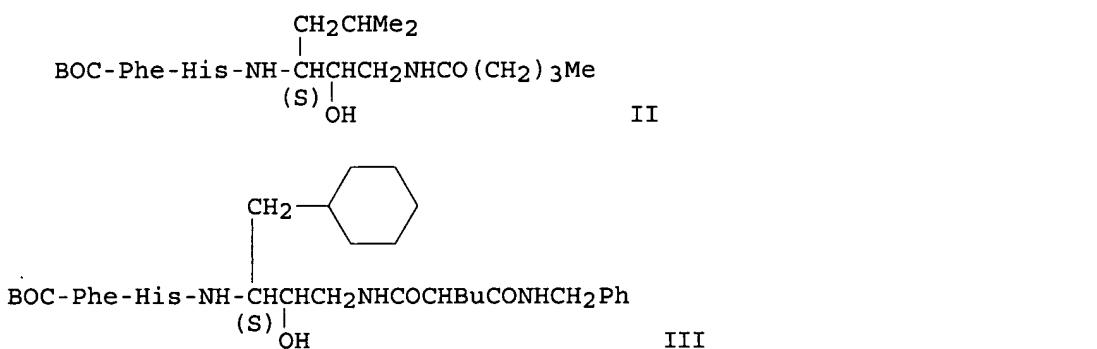


10/019,993

IT 88098-99-1P 88099-04-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prep. of, as hypoglycemic agent)

L15 ANSWER 61 OF 65 CA COPYRIGHT 2003 ACS
ACCESSION NUMBER: 108:75856 CA
TITLE: Preparation of peptides as renin inhibitors
INVENTOR(S): Gordon, Eric Michael
PATENT ASSIGNEE(S): Squibb, E. R., and Sons, Inc., USA
SOURCE: Eur. Pat. Appl., 69 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|--------------------|-----------------|----------|
| EP 223437 | A2 | 19870527 | EP 1986-308270 | 19861023 |
| EP 223437 | A3 | 19890830 | | |
| R: DE, FR, GB, IT | | | | |
| US 4749781 | A | 19880607 | US 1986-909434 | 19860919 |
| CA 1282549 | A1 | 19910402 | CA 1986-520676 | 19861016 |
| JP 62126158 | A2 | 19870608 | JP 1986-269514 | 19861112 |
| PRIORITY APPLN. INFO.: | | US 1985-797321 | | 19851112 |
| OTHER SOURCE(S): | | CASREACT 108:75856 | | |
| GI | | | | |



AB X-NHCHR₄CONHCHR₃CH(OH)CH₂NR₂COCHR₁R₅ (I; X = substituted
.alpha.-aminoalkanoyl; R₁, R₂ = H, alkyl, .omega.-arylalkyl,
.omega.-cycloalkylalkyl, .omega.-heterocyclylalkyl; R₃, R₄ = H,
haloalkyl, .omega.-carbamoylalkyl, etc.; R₅ = H, alkyl,
.omega.-cycloalkylalkyl, .omega.-arylalkyl, .omega.-heterocyclylalkyl,
etc.] and their pharmaceutically acceptable salts, useful as
renin inhibitors and therefore in the treatment of hypertension (no data),
are prepd. Peptide II was prep'd. in many steps from (S)-
Me₂CHCH₂CH(COCH₂Cl)NHCO₂CMe₃ via hydride redn., dehydrochlorination,
N-acylation with valeryl chloride, etc. Tablets were prep'd. each contg.
peptide III 250, cornstarch 100, gelatin 20, Avicel 50, and Mg stearate 5
mg.

IT 112739-52-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)

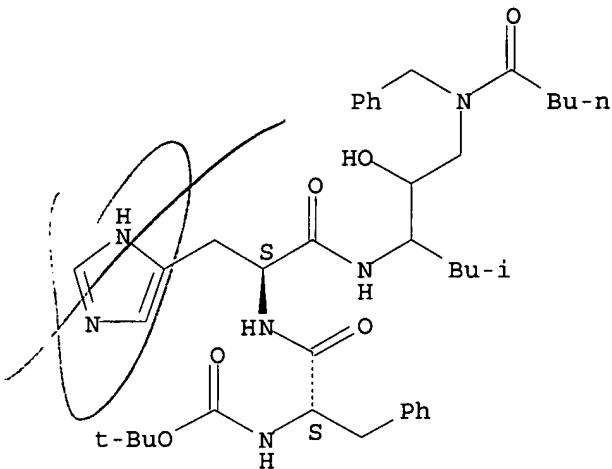
10/019, 993

(prepn. of, as antihypertensive)

RN 112739-52-3 CA

CN L-Histidinamide, N-[(1,1-dimethylethoxy) carbonyl] -L-phenylalanyl-N-[1-[1-hydroxy-2-[(1-oxopentyl) (phenylmethyl) amino]ethyl]-3-methylbutyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 112739-52-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of, as antihypertensive)

IT 112739-71-6P 112739-72-7P 112762-74-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antihypertensive peptides)

L15 ANSWER 62 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 100:6099 CA

TITLE: N,N-Disubstituted alkenamides and phenylalkenamides and their use as pharmaceuticals

INVENTOR(S): Nadelson, Jeffrey

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.; Sandoz-Patent-G.m.b.H.; Sandoz-Erfindungen Verwaltungsgesellschaft m.b.H.

SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

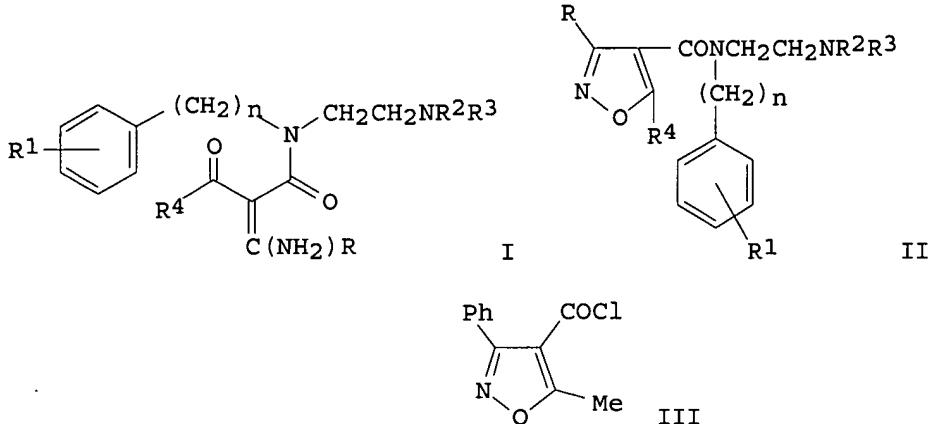
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|---|----------|-----------------|----------|
| EP 84292 | A1 | 19830727 | EP 1982-810533 | 19821209 |
| EP 84292 | B1 | 19850213 | | |
| | R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | |
| AT 11770 | E | 19850215 | AT 1982-810533 | 19821209 |
| DK 8205534 | A | 19830615 | DK 1982-5534 | 19821213 |
| JP 58110549 | A2 | 19830701 | JP 1982-219144 | 19821213 |
| HU 27472 | O | 19831028 | HU 1982-4019 | 19821213 |
| HU 189626 | B | 19860728 | | |

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| | | | | |
|------------------------|----|----------|----------------|----------|
| CA 1191511 | A1 | 19850806 | CA 1982-417542 | 19821213 |
| IL 67464 | A1 | 19860831 | IL 1982-67464 | 19821213 |
| FI 8204298 | A | 19830615 | FI 1982-4298 | 19821214 |
| AU 8291476 | A1 | 19830623 | AU 1982-91476 | 19821214 |
| AU 561008 | B2 | 19870430 | | |
| ES 518186 | A1 | 19840601 | ES 1982-518186 | 19821214 |
| ZA 8209190 | A | 19840725 | ZA 1982-9190 | 19821214 |
| PRIORITY APPLN. INFO.: | | | US 1981-330601 | 19811214 |
| | | | EP 1982-810533 | 19821209 |

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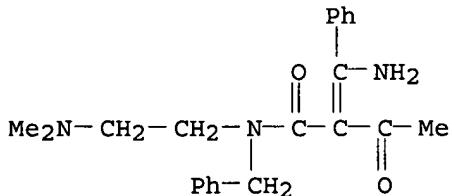
AB Title amides I [R = C1-4 alkyl, substituted Ph; R1 = halo, C1-4 alkyl, C1-4 alkoxy; R2, R3 = C1-4 alkyl; R2R3 = (CH₂)_m (m = 4, 5, 6), CH₂CH₂OCH₂CH₂; R4 = H, C1-6 alkyl; n = 0, 1], useful as antidiabetics (no data), were prep'd. by the reductive cleavage of isoxazoles II. Thus, PhNHCH₂CH₂NMe₂ was acylated with acid chloride III in THF contg. Et₃N to give II (R = Ph, R1 = H, R2-R4 = Me, n = 0), which was cleaved by hydrogenolysis over Pd/C to give I (R = Ph, R1 = H, R2-R3 = Me, n = 0).

IT 88098-99-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prep'n. of)

RN 88098-99-1 CA

CN Butanamide, 2-(aminophenylmethylene)-N-[2-(dimethylamino)ethyl]-3-oxo-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 88098-99-1P 88099-04-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prep'n. of)

L15 ANSWER 63 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 86:71947 CA

TITLE: Pharmaceutically useful carboxylic acid

10/019,993

amides
INVENTOR(S): Linke, Siegfried; Sitt, Ruediger
PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 109 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| DE 2515146 | A1 | 19761021 | DE 1975-2515146 | 19750408 |
| SE 7602707 | A | 19761009 | SE 1976-2707 | 19760227 |
| NO 7601050 | A | 19761011 | NO 1976-1050 | 19760325 |
| FI 7600919 | A | 19761009 | FI 1976-919 | 19760406 |
| NL 7603594 | A | 19761012 | NL 1976-3594 | 19760406 |
| BE 840469 | A1 | 19761007 | BE 1976-165915 | 19760407 |
| DK 7601641 | A | 19761009 | DK 1976-1641 | 19760407 |
| JP 51127002 | A2 | 19761105 | JP 1976-38348 | 19760407 |
| ZA 7602088 | A | 19770427 | ZA 1976-2088 | 19760407 |
| FR 2306683 | A1 | 19761105 | FR 1976-10309 | 19760408 |
| PRIORITY APPLN. INFO.: | | | DE 1975-2515146 | 19750408 |
| | | | DE 1975-2551483 | 19751117 |

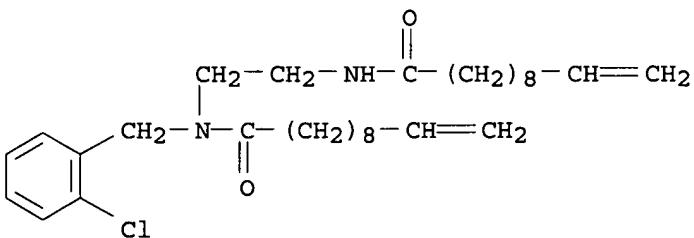
AB A total of 168 amides, most of them aliph. diamides, are prep'd. by acylation of polyamines with acid chlorides or acids and ClCO₂Et. Lipid-lowering data are given for apprx. 50 amides. Thus, reaction of H₂N(CH₂)₃NH₂ with CH₂:CH(CH₂)₈COCl in THF in presence of Et₃N at 5.degree. and 2 hr stirring at 60.degree. gives 84% CH₂:CH(CH₂)₈CONH(CH₂)₃NHCO(CH₂)₈CH:CH₂.

IT 61797-03-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antilipemic activity of)

RN 61797-03-3 CA

CN 10-Undecenamide, N-[(2-chlorophenyl)methyl]-N-[2-[(1-oxo-10-undecenyl)amino]ethyl] - (9CI) (CA INDEX NAME)



IT 61797-03-3P 61797-12-4P 61797-13-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and antilipemic activity of)

L15 ANSWER 64 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 63:34608 CA

ORIGINAL REFERENCE NO.: 63:6210h,6211a-b

TITLE: Easily obtainable antiserotonin which has little effect on the brain

AUTHOR(S): Dombro, R. S.; van der Hoeven, T.; Woolley, D. W.

CORPORATE SOURCE: Rockefeller Inst., New York, NY

SOURCE: Nature (1965), 206(4984), 631-2

10/019,993

DOCUMENT TYPE: Journal
LANGUAGE: English

AB m-Methoxy-N-benzylcinnamamide was mixed with 2 equivs. of NaH in HCONMe₂ or Me₂SO, treated with 1.1 equivs. of ClCH₂CH₂NH₂.HCl in the same solvent and allowed to react 20 hrs. (120.degree. with HCOMe₂, room temp. with Me₂SO), the mixt. dild. with EtOAc, and extd. with aq. HCl. The mixt. was made alk. and extd. with EtOAc, the ext. concd., and the bioxalate formed by addn. of (CO₂H)₂ to an Me₂CO soln. of the residue, to give N-aminoethyl-N-benzyl-m-methoxycinnamamide bioxalate, m. 188-90.degree.; hydrochloride, m. 191-3.degree.. This compd. will not readily pass through the blood-brain barrier and is useful to test peripheral actions. In the rat uterus test, the hydrochloride gave half-max. inhibition at 0.4 .gamma./ml. against 0.01 serotonin/ml. This was 15% as effective as the corresponding dimethylamino compd. (III) (CA, 60, 16361a). The drug gave a median effective dose of 30 mg./kg. against diarrhea from administered 5-hydroxytryptophan in mice. Thus, in the diarrhea test, the compd. is more potent than III but less potent than hydrazinodole.

IT 3115-15-9, Cinnamamide, N-(2-aminoethyl)-N-benzyl-m-methoxy-, oxalate (1:1)
(prepn. of)

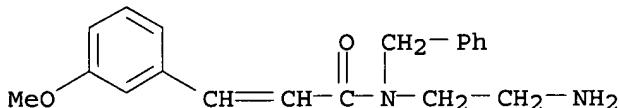
RN 3115-15-9 CA

CN Cinnamamide, N-(2-aminoethyl)-N-benzyl-m-methoxy-, oxalate (1:1) (8CI)
(CA INDEX NAME)

CM 1

CRN 554-39-2

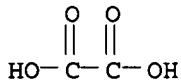
CMF C19 H22 N2 O2



CM 2

CRN 144-62-7

CMF C2 H2 O4



IT 3115-15-9, Cinnamamide, N-(2-aminoethyl)-N-benzyl-m-methoxy-, oxalate (1:1)
(prepn. of)

IT 554-39-2, Cinnamamide, N-(2-aminoethyl)-N-benzyl-m-methoxy-
(serotonin inhibition by, brain and)

IT 3115-16-0, Cinnamamide, N-benzyl-N-[2-(dimethylamino)ethyl]-m-methoxy-
(serotonin inhibition by, N-(2-aminoethyl)-N-benzyl-m-methoxycinnamamide and)

L15 ANSWER 65 OF 65 CA COPYRIGHT 2003 ACS

ACCESSION NUMBER: 60:93472 CA

ORIGINAL REFERENCE NO.: 60:16361a-c

10/019, 993

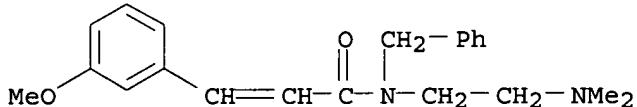
TITLE: Cinnamamides as structural analogs and antagonists of serotonin
AUTHOR(S): Dombro, R. S.; Woolley, D. W.
CORPORATE SOURCE: Rockefeller Inst., New York, NY
SOURCE: Biochem. Pharmacol. (1964), 13(4), 569-76
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Cinnamamides with aminoalkyl groups on the amide nitrogen were conceived as structural analogs of serotonin which would act as antimetabolites of it. Several such amides were synthesized and tested for antiserotonin activity on the isolated rat uterus and in living animal. All such amides that were tested acted as antagonists of the hormone. When the structural analogy to serotonin was increased by introduction of a meta-methoxyl group in the benzene ring, antiserotonin potency was increased considerably. A further increase in potency was achieved by introduction of a benzyl group on the amide nitrogen. The most active cinnamamide proved to be more active as a serotonin antagonist in the rat uterus assay than the previously known and highly potent 1-benzyl-2-methyl-5-methoxytryptamine (BAS), and was much easier to synthesize. It was, however, less active than BAS in the in vivo assay that was used. The compounds were not antagonistic toward acetylcholine or bradykinin on rat uterus. It was suggested that some previously known cinnamamides may owe some of their pharmacol. activity (e.g. local anesthetic) to their ability to act as antimetabolites of serotonin.

IT 10231-08-0, Cinnamamide, N-benzyl-N-[2-(dimethylamino)ethyl]-m-methoxy-, hydrochloride
(prepn. and serotonin antagonism by)

RN 10231-08-0 CA

CN 2-Propenamide, N-[2-(dimethylamino)ethyl]-3-(3-methoxyphenyl)-N-(phenylmethyl)-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

IT 10231-08-0, Cinnamamide, N-benzyl-N-[2-(dimethylamino)ethyl]-m-methoxy-, hydrochloride 106458-10-0, Cinnamamide, N-benzyl-N-[2-(dimethylamino)ethyl]-o-methoxy-, hydrochloride 106630-90-4, Cinnamamide, N-benzyl-N-[2-(dimethylamino)ethyl]-p-methoxy-, hydrochloride
(prepn. and serotonin antagonism by)

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(FILE 'HOME' ENTERED AT 14:36:28 ON 29 JAN 2003)

FILE 'REGISTRY' ENTERED AT 14:36:34 ON 29 JAN 2003

L1 STRUCTURE UPLOADED
L2 10 S L1 SAM
L3 970 S L1 FULL
L4 683 S L3 AND CA/LC
L5 287 S L3 NOT L4
L6 0 S L5 AND USPATFULL/LC

10/019, 993

L7 12 S L5 AND CAOLD/LC
L8 275 S L5 NOT L7
L9 10 S L8 AND CAPLUS/LC
L10 265 S L8 NOT L9

FILE 'CA' ENTERED AT 14:41:23 ON 29 JAN 2003
L11 253 S L3
L12 75029 S CNS OR (CENTRAL NERVOUS)
L13 7 S L12 AND L11
L14 246 S L11 NOT L13
L15 65 S L14 AND (PHARM? OR DRUG)

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=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 14:45:01 ON 29 JAN 2003